

**SONY**

VIDEO SWITCHER

**BVS-3200CP**

MAINTENANCE MANUAL

Volume 1 1st Edition

Serial No.10001 and Higher

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# TABLE OF CONTENTS

## Volume 1

### 1. INSTALLATION

1-1.	Environmental Requirements . . . . .	1-1
1-2.	External Dimensions . . . . .	1-1
1-3.	Space Requirements for Installation . . . . .	1-2
1-4.	Power Supply . . . . .	1-2
1-5.	Setting the System Select Switches . . . . .	1-2
1-5-1.	IV-25 Board . . . . .	1-2
1-5-2.	SD-19 Board . . . . .	1-3
1-5-3.	SD-20 Board . . . . .	1-4
1-5-4.	DUS-312 Board . . . . .	1-7
1-6.	Connector Input/Output . . . . .	1-7
1-6-1.	Processor . . . . .	1-7
1-6-2.	Console Unit . . . . .	1-13
1-7.	Connections to the Connectors . . . . .	1-14
1-7-1.	Process Unit . . . . .	1-14
1-7-2.	Console Unit . . . . .	1-14
1-8.	Connections between the Processor and the Console . . . . .	1-15
1-9.	Rack Mounting . . . . .	1-16
1-10.	Accessories Supplied . . . . .	1-16
1-11.	Other Accessories (sold separately) . . . . .	1-16

### 2. SERVICE INFORMATION

2-1.	Removing the Outer Cabinet . . . . .	2-1
2-2.	Board Location Diagram . . . . .	2-2
2-2-1.	Process Unit . . . . .	2-2
2-2-2.	Console Unit . . . . .	2-2
2-3.	Circuit Configuration . . . . .	2-3
2-3-1.	Process Unit . . . . .	2-3
2-3-2.	Console Unit . . . . .	2-3
2-4.	Removing the Boards . . . . .	2-4
2-4-1.	Process Unit . . . . .	2-4
2-4-2.	Console Unit . . . . .	2-5
2-5.	Servicing Procedure . . . . .	2-6
2-5-1.	The EX-201 Board (For the WP-27, SY-138, SD-19, SD-20, EF-20 and EF-20C boards) . . . . .	2-6
2-5-2.	The EX-236 Board (For CN333 and the EN-80, and IV-25 boards) . . . . .	2-7
2-6.	Replacing Main Components . . . . .	2-7
2-6-1.	Processor . . . . .	2-7
2-6-2.	Console . . . . .	2-10

### 3. TECHNICAL INFORMATION

3-1.	System Block Diagram . . . . .	3-1
3-1-1.	Example of an Editing System (Video System) . . . . .	3-1
3-1-2.	Example of an Editing System (Control System) . . . . .	3-1
3-2.	Self-diagnostics . . . . .	3-2
3-3.	Status . . . . .	3-2

### 4. ELECTRICAL ALIGNMENT

(This Section will be Available at a Later Date.)

## Volume 2

### 5. BLOCK DIAGRAMS

### 6. SEMICONDUCTOR ELECTRODES

### 7. SCHEMATIC DIAGRAMS

### 8. PRINTED CIRCUIT BOARDS

### 9. SPARE PARTS AND FIXTURE

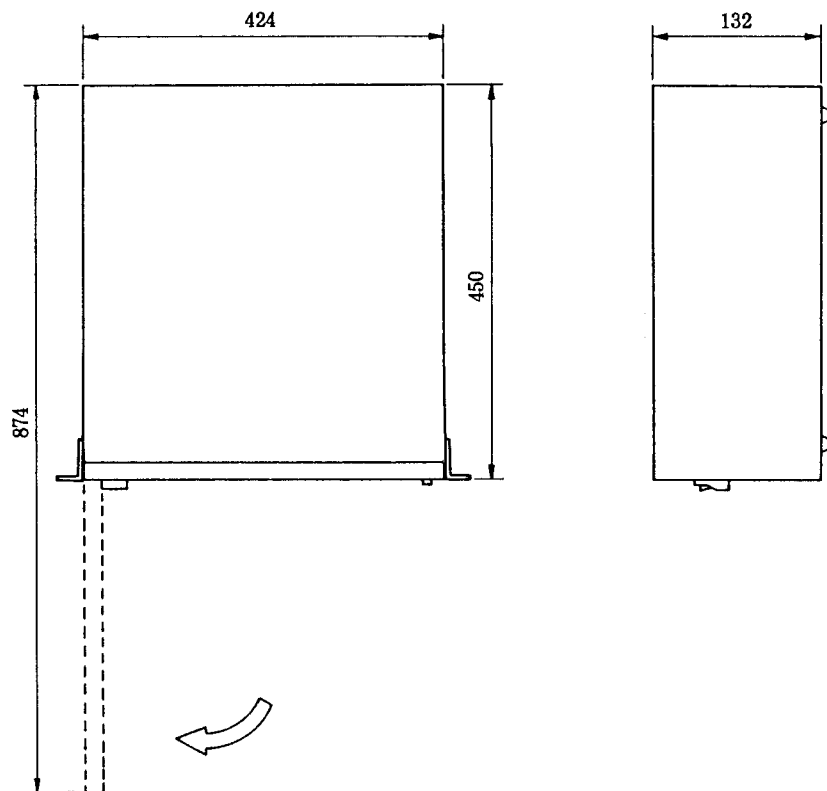
# SECTION 1 INSTALLATION

## 1-1. ENVIRONMENTAL REQUIREMENTS

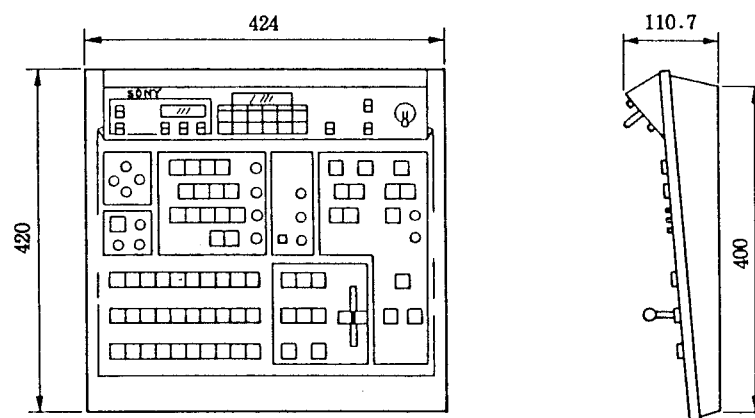
- . Carefully consider the air circulation of the place in which the unit will be placed to protect against temperature rises within the unit.
- . Since the ambient temperature range for the set during operations is 0°C to 40°C, never place the unit near a heat source.

## 1-2. EXTERNAL DIMENSIONS

### . Process unit

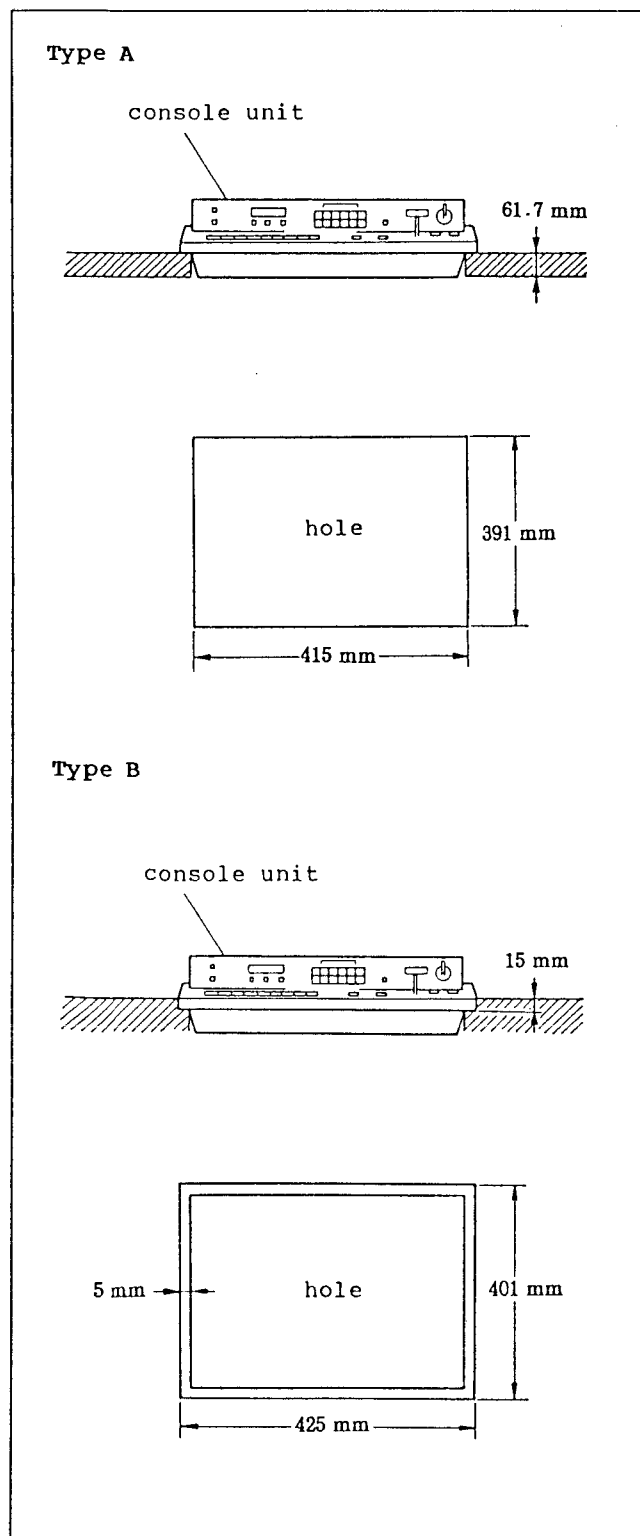


### . Console unit



### 1-3. SPACE REQUIREMENTS FOR INSTALLATION

- If the unit is to be installed in a console, be sure to cut a hole in the console of the dimensions given in one of the diagrams below.



### 1-4. POWER SUPPLY

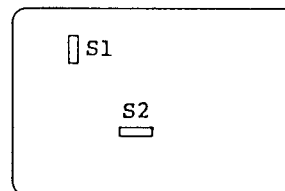
- Since the power supply for the BVS-3200C utilizes a switching regulator (+5V, +9.5V, +15V, and  $\pm 9V$ ), the unit can be operated without modification on any power supply in the 220V  $\pm 10\%$  range.

### 1-5. SETTING THE SYSTEM SELECT SWITCHES

- The select switches on all PC boards are described in the pages that follow. Since the select switches should be set according to operational requirements and the type of system desired, be sure to set them accordingly.

#### 1-5-1. IV-25 Board

##### IV-25 board

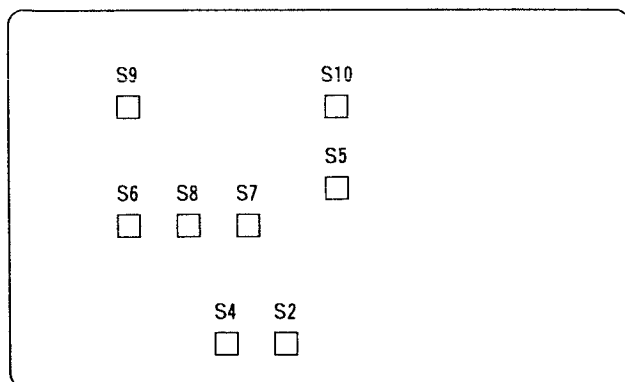


- S1:** Y, R-Y, and B-Y switch or RGB switch  
This switch is used to select either the desired Y, R-Y, or B-Y input signal or the desired RGB input signal of the Betacam.  
Y, R-Y, and B-Y: These signals are all sent to the cross point unchanged.  
RGB: The RGB signal is transformed into Betacam format signals (Y, R-Y, and B-Y) and sent to the cross point.
- S2:** SET UP ON/OFF switch  
Set to on when the RGB input is to be transformed to Betacam signals with set up on.  
Set to off when the RGB input is to be transformed to Betacam signals with set up off.

#### Factory Settings

SW NO.	Setting
S1	Y, R-Y, B-Y
S2	OFF

## 1-5-2. SD-19 Board



SD-19 board

### . S2: BLACK BURST INT/EXT switch

EXT/INT is selected for the black burst signal and fade to black color black.

INT: The signal generated by the black burst generator within the unit is output.

EXT: Black burst signal received at GEN LOCK IN (on the connector panel) is output.

### . S4: SYNC REPLACEMENT ON/OFF switch

This is the switch used to replace the SYNC burst which is used to internally generate the blanking interval of the video signal which is output from PGM OUT (on the connector panel).

ON: Replace

OFF: Not replace

Switches S1, S2, and S3 all bear relationships with each other. The way in which they function is shown in the chart below.

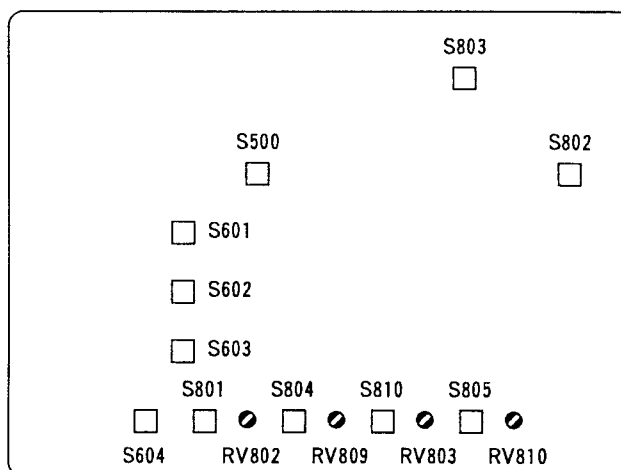
		SYNC REPLACEMENT ON/OFF Switch								
		ON				OFF				
		B. B Switch				B. B Switch				
		EXT		INT		EXT		INT		
		SET UP Switch		SET UP Switch		SET UP Switch		SET UP Switch		
		ON	OFF	ON	OFF	ON	OFF	ON	OFF	
SET UP (IRE)	COLOR BLACK for PRIMARY BUSES	7.5	0	The same as GEN LOCK IN	7.5	0	7.5	0	7.5	0
	COLOR BLACK for FADE TO BLACK						The same as GEN LOCK IN			
	BLACK BURST OUT 1/2/3/4									
SYNC/ BURST	PGM OUT	The same as GEN LOCK IN		The inner SYNC GEN		The same as PRIMARY VIDEO				
	PVW OUT	The same as PRIMARY VIDEO								

- . S5: KEY PROCESSOR ADJ A/B switch  
This switch is used when making adjustments to the key processor section.  
A: during normal operations.  
B: during adjustment.
- . S6: BKGD COLOR ADJ ON/OFF switch  
This switch is used when adjusting the chroma for the background color.  
ON: during adjustment.  
OFF: during normal operations.
- . S7: EFFECT MATTE COLOR (OVER) ADJ ON/OFF switch  
This switch is used when adjusting the chroma for the matte color (over).  
ON: during adjustment.  
OFF: during normal operations.
- . S8: EFFECT MATTE COLOR (UNDER) ADJ ON/OFF switch  
This switch is used when adjusting the chroma for the matte color (under).  
ON: during adjustment.  
OFF: during normal operations.
- . S9: FTB ADJ/CONT switch  
This switch is used when making adjustments to the fade to black section.  
ADJ: during adjustment.  
CONT: during normal operations.
- . S10: FTB Y/(R/B) switch  
This switch is used to select the conditions for replacing the blanking interval for the color difference signals.  
Y: Replacement on/off is selected using S4 in the same manner as with the Y signal.  
R-B: The blanking interval for the color difference signals is replaced regardless of the setting of S4.

#### Factory settings

SW NO.	Setting
S2	INT
S4	ON
S5	A
S6	OFF
S7	OFF
S8	OFF
S9	CONT
S10	R/B

#### 1-5-3. SD-20 Board



SD-20 board

- . S500: DSK MATTE COLOR ADJ ON/OFF switch  
This switch is used to adjust the DSK color chroma.  
ON: during adjustment.  
OFF: during normal operations.
- . S601: CHROMA KEY DELAY select switch  
This switch is used to adjust the delay for the chroma key signal.
- . S602: CHROMA KEY DELAY select switch  
This switch is used to adjust the delay for the chroma key signal.
- . S603: CHROMA KEY DELAY select switch  
This switch is used to adjust the delay for the chroma key signal. The relationship between the switches and the delay for the chroma key signal.



The relationship between the switches and the delay  
for the chroma key signal

○: ON

Delay nsec	S601								S602								S603					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6
0																					○	○
30									○	○										○		
60									○		○									○		
90									○			○								○		
120									○				○							○		
150									○					○						○		
180									○						○					○		
210									○							○				○		
240									○								○			○		
270									○									○		○		
300									○										○	○		
330	○	○					○			○										○		
360	○	○					○				○									○		
390	○	○					○					○								○		
420	○	○					○						○							○		
450	○	○					○							○						○		
480	○	○					○								○					○		
510	○	○					○									○				○		
530	○	○	○	○				○		○										○		
540	○	○					○										○			○		
560	○	○	○	○				○			○									○		
570	○	○					○											○		○		
590	○	○	○	○				○				○								○		
600	○	○					○												○	○		
620	○	○	○	○				○					○							○		
650	○	○	○	○				○						○						○		
680	○	○	○	○				○							○					○		
710	○	○	○	○			○									○				○		
740	○	○	○	○			○										○			○		
770	○	○	○	○				○										○		○		
800	○	○	○	○				○											○	○		
830	○	○	○	○	○	○				○										○		
860	○	○	○	○	○	○					○									○		
890	○	○	○	○	○	○						○								○		
920	○	○	○	○	○	○							○							○		
950	○	○	○	○	○	○								○						○		
980	○	○	○	○	○	○									○					○		
1010	○	○	○	○	○	○										○				○		
1040	○	○	○	○	○	○											○			○		
1070	○	○	○	○	○	○												○		○		
1100	○	○	○	○	○	○													○	○		

. S604: CRK, Y-R, and B/RGB select switch  
This is the switch used to select the chroma key input.

. S801: SYNC GEN LOCK SC PHASE 0°/180° switch

RV802: SYNC GEN LOCK SC PHASE FINE volume control

These are the switch and the volume control for aligning the SC phi phase of the SYNC GEN LOCK signal of the main unit with the standard signal received from GEN LOCK IN.

Make rough adjustments (0° to 180°) using S801, and make fine adjustments using S802.

. S802: CABLE COMP ON/OFF switch

This is the switch used when compensating for the length of the cable being used. The gain for the input signal (the GEN LOCK signal) rises by about 6dB when this switch is set to on.

. S803: V BLANKING WIDTH select switch

The V blanking width can be set to 19H, 20H, or 21H depending on the position this switch is set to.

. S804: SYNC GEN LOCK H PHASE COARSE switch

RV809: SYNC GEN LOCK H PHASE FINE volume control

These are the switch and the volume control for aligning the horizontal SYNC phase of the SYNC GEN LOCK signal of the main unit with the standard signal received from GEN LOCK IN.

Make rough adjustments using S804, and make fine adjustments using S809. Since S804 is a 16 step rotary switch, the phase can be adjusted by approximately 220nsec per step.

. S805: AUX. BLACK BURST H PHASE COARSE switch

. RV810: AUX. BLACK BURST H PHASE FINE volume control

These are the switch and the volume control for aligning the horizontal SYNC phase of the standard signal sent to the SONY Digital Multi Effector DME-450.

Make rough adjustments using S805, and make fine adjustments using S810.

Since S805 is a 16 step rotary switch, the phase can be adjusted by approximately 70nsec per step.

. S810: AUX. BLACK BURST SC PHASE 0°/180° switch

RV803: AUX. BLACK BURST SC PHASE FINE volume control

These are the switch and the volume control for aligning the SC phi phase of the standard signal sent to the SONY Digital Multi Effector DME-450.

Make rough adjustments (0° to 180°) using S810, and make fine adjustments using RV803.

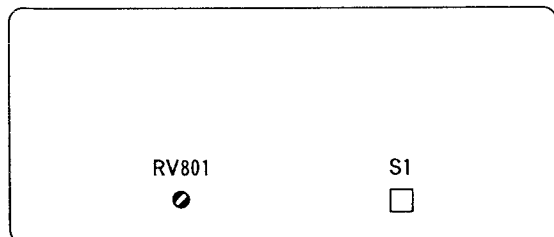
#### Factory Settings

SW NO.	Setting
S500	OFF
S601	1 OFF
	2 OFF
	3 OFF
	4 OFF
	5 OFF
	6 OFF
	7 OFF
	8 OFF
S602	1 OFF
	2 OFF
	3 OFF
	4 OFF
	5 OFF
	6 OFF
	7 OFF
	8 OFF

SW NO.	Setting
S603	1 OFF
	2 OFF
	3 OFF
	4 OFF
	5 OFF
	6 OFF
	7 ON
	8 ON
S604	RGB
S801	0
S802	OFF
S803	23
S804	0
S805	0
S810	0

#### 1-5-4. DUS-312 Board

##### DUS-312 board



##### . S1: Input V(B)S/V(B) switch

This is the switch used to select the primary input video signal.

V(B)S: selects the video signal with SYNC.

V(B): selects the video signal without SYNC.

##### RV801: Blanking level bolume control

The blanking interval for the video signal output from PGM OUT (on the connector panel) is replaced when S4 on the SD-19 board is set to on.

##### Factory setting

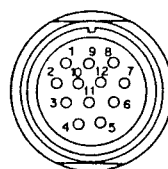
SW NO.	Setting
S1	V(B)S

#### 1-6. CONNECTOR INPUT/OUTPUT

##### 1-6-1. Processor

. VIDEO IN 1 to 5 connectors  
BNC connector; bridge-through output terminals.

. VIDEO IN 6 connector  
BNC connector; terminated in 75 Ohms.  
12 pin multi-connector; terminated in 75 Ohms.



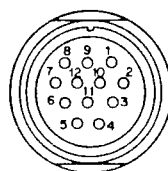
- EXT VIEW -

PIN NO.	Pin Name
1	VIDEO IN 6 Y
2	VIDEO IN 6 Y(G)
3	VIDEO IN 6 R-Y
4	VIDEO IN 6 R-Y(G)
5	VIDEO IN 6 B-Y
6	VIDEO IN 6 B-Y(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

. VIDEO IN 7 connector

BNC connector; terminated in 75 Ohms.

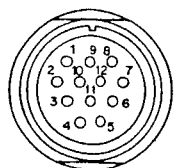
12 pin multi-connector; terminated in 75 Ohms.



- EXT VIEW -

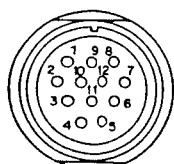
PIN NO.	Pin Name
1	VIDEO IN 7 Y
2	VIDEO IN 7 Y(G)
3	VIDEO IN 7 R-Y
4	VIDEO IN 7 R-Y(G)
5	VIDEO IN 7 B-Y
6	VIDEO IN 7 B-Y(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

- . VIDEO IN 8 connector  
BNC connector; terminated in 75 Ohms.  
12 pin multi-connector; terminated in 75 Ohms.



PIN NO.	Pin Name
1	VIDEO IN 8 Y
2	VIDEO IN 8 Y(G)
3	VIDEO IN 8 R-Y
4	VIDEO IN 8 R-Y(G)
5	VIDEO IN 8 B-Y
6	VIDEO IN 8 B-Y(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

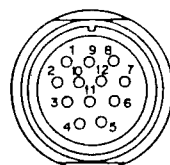
- . EXT VIDEO IN 1 connector  
BNC connector; terminated in 75 Ohms.  
12 pin multi-connector; terminated in 75 Ohms.



PIN NO.	Pin Name
1	EXT VIDEO Y
2	EXT VIDEO Y(G)
3	EXT VIDEO R-Y
4	EXT VIDEO R-Y(G)
5	EXT VIDEO B-Y
6	EXT VIDEO B-Y(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

- . EXT VIDEO IN 2 connector  
BNC connector; bridge-through output terminal.
- . DSK EXT VIDEO IN connector  
BNC connector; bridge-through output terminals.

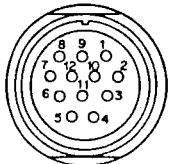
- . CHROMA KEY IN connector  
BNC connector; terminated in 75 Ohms.  
12 pin multi-connector, terminated in 75 Ohms.



- EXT VIEW -

PIN NO.	Pin Name
1	CHROMA KEY G/Y
2	CHROMA KEY G/Y(G)
3	CHROMA KEY R/R-Y
4	CHROMA KEY R/R-Y(G)
5	CHROMA KEY B/B-Y
6	CHROMA KEY B/B-Y(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

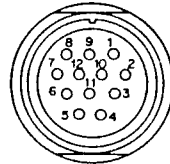
- . EXT KEY 1 IN and EXT KEY 2 IN connectors  
BNC connector; bridge-through output  
terminal.
- . EXT KEY MASK IN connector  
BNC connector; terminated in 75 Ohms.
- . DSK EXT KEY IN connector  
BNC connector; bridge-through output  
terminal.
- . BLACK BURST OUT 1, 2, 3, and 4 connectors  
BNC connector.
- . GEN LOCK IN connector  
BNC connector; bridge-through output  
terminal.
- . PVW OUT connector  
BNC connector.
- . PGM OUT 1 and 2 connectors  
BNC connector.  
12 pin multi-connector.



- EXT VIEW -

PIN NO.	Pin Name
1	PGM Y 2
2	PGM Y(G)
3	PGM R-Y OUT 2
4	PGM R-Y OUT 2(G)
5	PGM B-Y OUT 2
6	PGM B-Y OUT 2(G)
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____

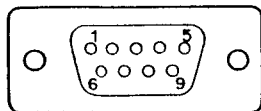
- . AUX BB OUT connector  
BNC connector.
- . KEY 1 BUS OUT connector  
BNC connector.  
12 pin multi-connector.



- EXT VIEW -

PIN NO.	Pin Name
1	K1 BUS Y OUT
2	K1 BUS Y OUT(G)
3	K1 BUS P-Y OUT
4	K1 BUS R-Y OUT(G)
5	K1 BUS B-Y OUT
6	K1 BUS B-Y OUT(G)
7	_____
8	_____
9	REF OUT
10	REF OUT(G)
11	_____
12	_____

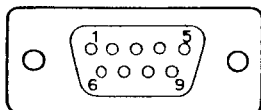
- . DME-450/450P  
DME-450/450P (D-SUB 9 pins)



- EXT VIEW -

PIN NO.	Pin Name	Description
1	GND	Ground
2	RX-A	Data received by BVS-3200C/3200CP from DME-450/450P (-)
3	TX-B	Data transmitted to DME-450/450P from BVS-3200C/3200CP (+)
4	GND	Ground
5	—	—
6	GND	Ground
7	RX-B	Data received by BVS-3200C/3200CP from DME-450/450P (+)
8	TX-A	Data transmitted to DME-450/450P from BVS-3200C/3200CP (-)
9	GND	Ground

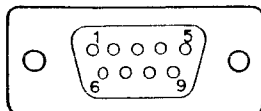
- . AUX (D-SUB 9 pins)



- EXT VIEW -

PIN NO.	Pin Name
1	GND
2	TX-A
3	RX-B
4	GND
5	—
6	GND
7	TX-B
8	RX-A
9	GND

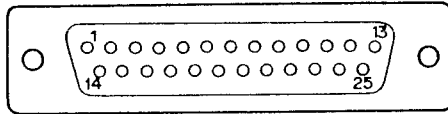
- . EDITOR (D-SUB 9 pins)



- EXT VIEW -

PIN NO.	Pin Name	Description
1	GND	Ground
2	TX-A	Data transmitted to Editor from BVS-3200C/3200CP (-)
3	RX-B	Data received by BVS-3200C/3200CP from Editor (+)
4	GND	Ground
5	—	—
6	GND	Ground
7	TX-B	Data transmitted to Editor from BVS-3200C/3200CP (+)
8	RX-A	Data received by BVS-3200C/3200CP from Editor (-)
9	GND	Ground

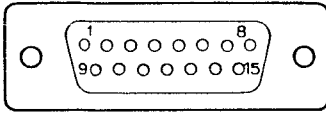
. CONTROL PANEL (D-SUB 25 pins)



- EXT VIEW -

PIN NO.	Pin Name	Description
1	GND	Ground
2	POWER (+9.5 V)	Power supply (+9.5 V)
3	TX-A	Data transmitted to the console from the processor (-)
4	GND	Ground
5	RX-A	Data received by the processor from the console (-)
6	_____	_____
7	_____	_____
8	_____	_____
9	FIELD PLS-A	Field Pulse (-)
10	GND	Ground
11	SHORT SENSE	Short Sense
12	POWER (GND)	Earth ground
13	POWER (GND)	Earth ground
14	POWER (+9.5 V)	Power supply (+9.5 V)
15	POWER (+9.5 V)	Power supply (+9.5 V)
16	TX-B	Data transmitted to the console from the processor (+)
17	GND	Ground
18	RX-B	Data received by the processor from the console (+)
19	_____	_____
20	_____	_____
21	_____	_____
22	FIELD PLS-B	Field Pulse (+)
23	_____	_____
24	DTR	Console connection check
25	POWER (GND)	Earth ground

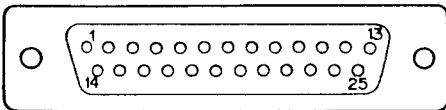
• GPI (D-SUB 15P)



- EXT VIEW -

PIN NO.	Pin Name	Description
1	GPI-FADER	AUTO FADER data
2	GPI (GND)	Ground
3	GPI-DSK	DOWN STREAM KEYER MIX data
4	GPI (GND)	Ground
5	GPI-FTB	FADE TO BLACK data
6	GPI (GND)	Ground
7	GPI-SEL	Irrigger fader selected at the console
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____
15	GPI (GND)	Ground

• TALLY (D-SUB 25P)



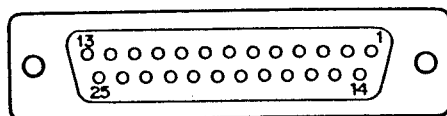
- EXT VIEW -

PIN NO.	Pin Name
1	TALLY-1
2	GND
3	TALLY-2
4	GND
5	TALLY-3
6	GND
7	TALLY-4
8	GND
9	TALLY-5
10	GND
11	TALLY-6
12	GND
13	_____
14	_____
15	TALLY-7
16	GND
17	TALLY-8
18	GND
19	_____
20	_____
21	_____
22	_____
23	_____
24	_____
25	_____



## 1-6-2. Console Unit

CN1 (D-SUB 25 pins)



- EXT VIEW -

PIN NO.	Pin Name	Description
1	F.G.	Frame ground
2	POWER (+)	Power supply (+)
3	CONS RX-A	Data received by the console from the processor (-)
4	CONS TX-COM	Common ground for transmissions between the console and the processor
5	CONS TX-A	Data transmitted to the processor from the console (-)
6	_____	_____
7	_____	_____
8	_____	_____
9	FIELD PLS-A	Field pulse (-)
10	FIELD PLS-COM	Field pulse common ground
11	SHORT SENSE	Short sense
12	POWER (GND)	Earth ground
13	POWER (GND)	Earth ground
14	POWER (+)	Power supply (+)
15	POWER (+)	Power supply (+)
16	CONS RX-B	Data received by the console from the processor (+)
17	CONS RX-COM	Common ground for transmissions between the processor and the console
18	CONS TX-B	Data transmitted from the console to the processor (+)
19	_____	_____
20	_____	_____
21	_____	_____
22	FRAME PLS-B	Field pulse (+)
23	_____	_____
24	DTR	Console connection check
25	POWER (GND)	Earth ground

1. INVOLUNTARY

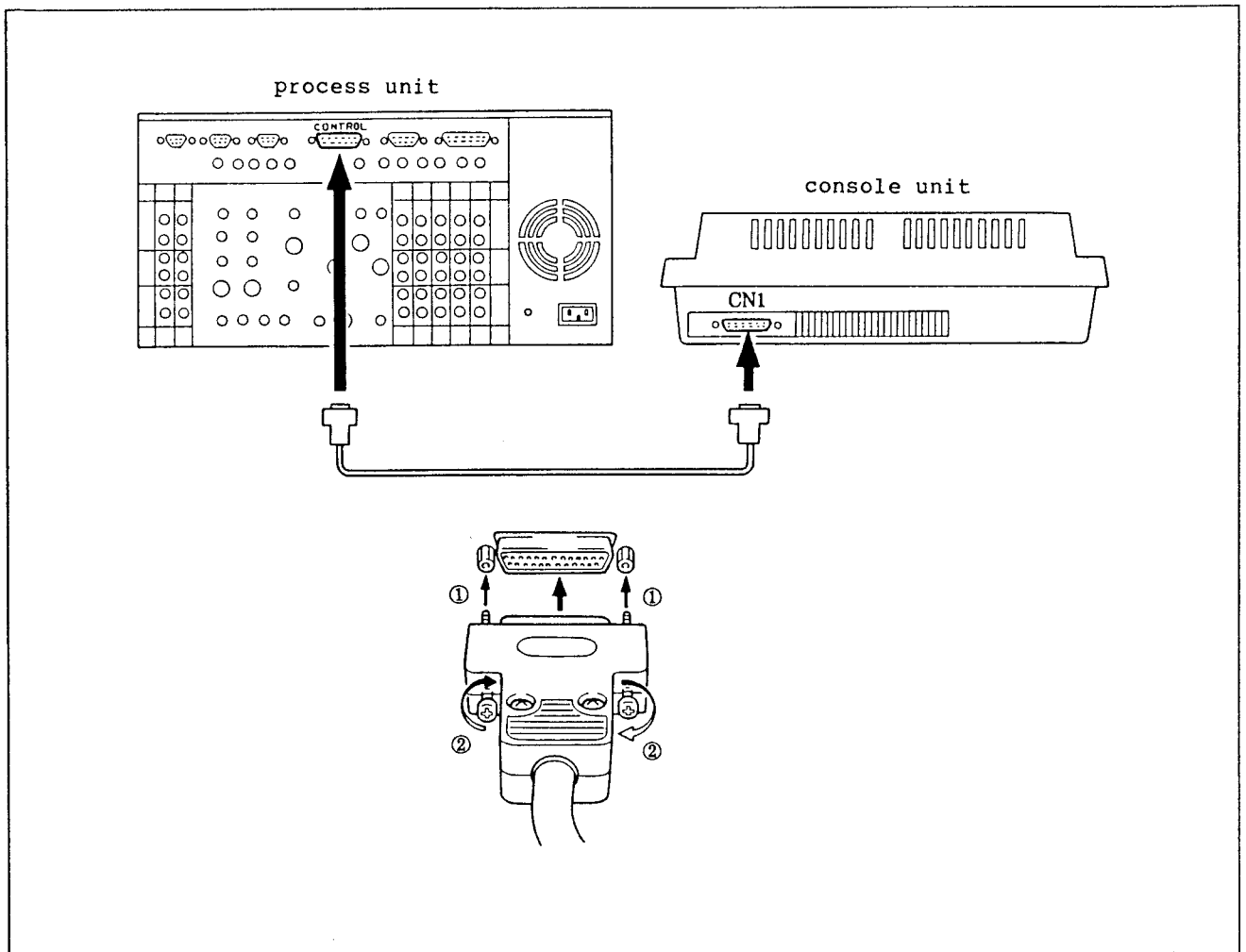
### 1-7-1. Process Unit

### 1-7-2. Console Unit

BVS-3200C (UC)  
BVS-3200CP (EK)

**1-8. CONNECTIONS BETWEEN THE PROCESSOR AND  
THE CONSOLE**

- (1) Plug in the connector.
- (2) Tighten the screws and affix.



### 1-9. RACK MOUNTING

#### <Recommended parts>

Slide rails: 2 Accuride Rack Mount Slides, Model C-203-26; slide length 26 inches.

Brackets: 4 Tokyo Metal Brackets, #816.

#### <Necessary equipment>

6 inner member installation screws (+B4x5)  
8 plate nuts (3 holes each) (SONY part No. 3-651-812-01)

8 bracket installation screws (1) (+B4x8)

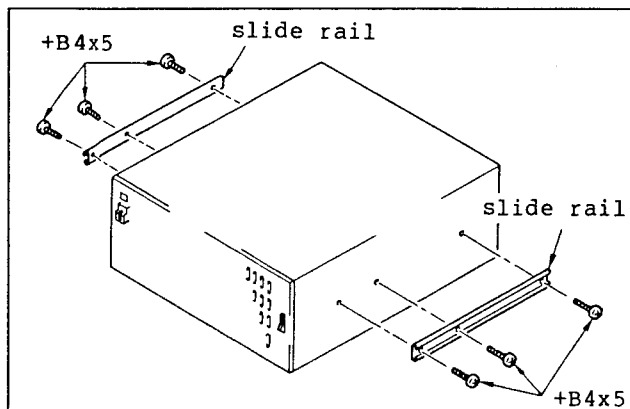
8 bracket installation screws (2) (+B4x12)

4 rack mount screws (+RK5x16)

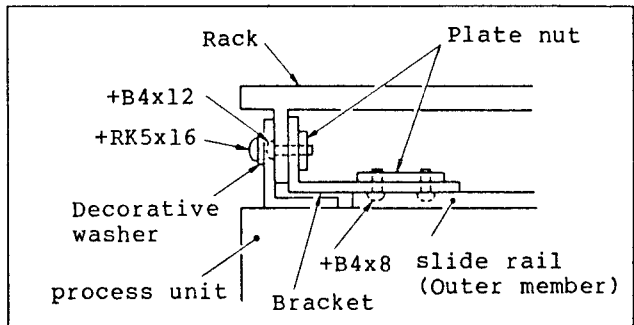
4 rack mount dress washers (SONY part No. 2-297-913-01)

#### <Rack mount procedure>

1. Remove the two screws from the left and right panels, and attach the slide rails with the 6 screws (+B4x5).



2. Attach the outer member of each slide rail loosely to the four bracket plate nuts (3 holes each) using the 8 screws (+B4x8).
3. Fasten the brackets of the outer member of each slide rail to the rack using the plate nuts and adjust so that total length of the slide rail from the front end to the outside is aligned with the inner members on the unit side.



### 1-10. ACCESORIES SUPPLIED

- . EX-201 extension board (1)
- . EX-236 extension board (1)
- . Rack angles (2)
- . Rack angle installation screws (+PSW4x16) (4)
- . 15 pin connector (1)
- . 25 pin connector (1)
- . 25 pin to 25 pin connector cord (1)
- . Power supply cord (1)
- . Plug holder (1)
- . Key top (4)
- . Operation Guide Book (1)
- . Operation Manual (1)
- . Maintenance Manual Vol. 1 (1)
- . Maintenance Manual Vol. 2 (2)

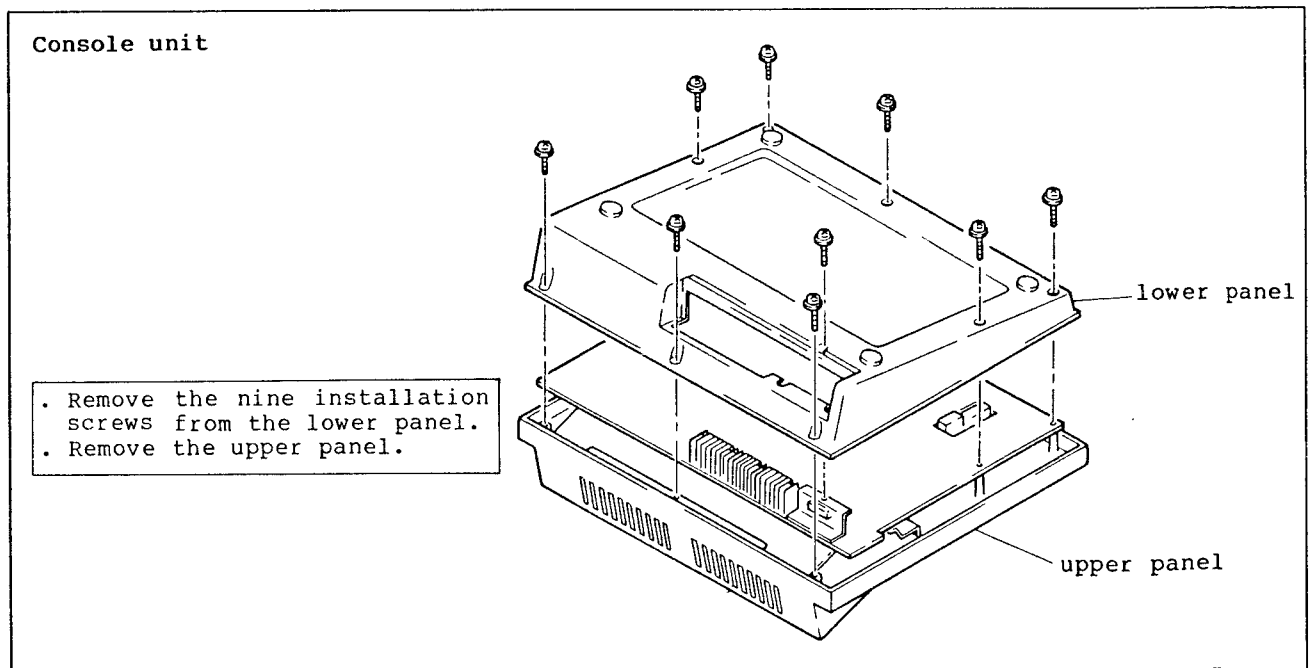
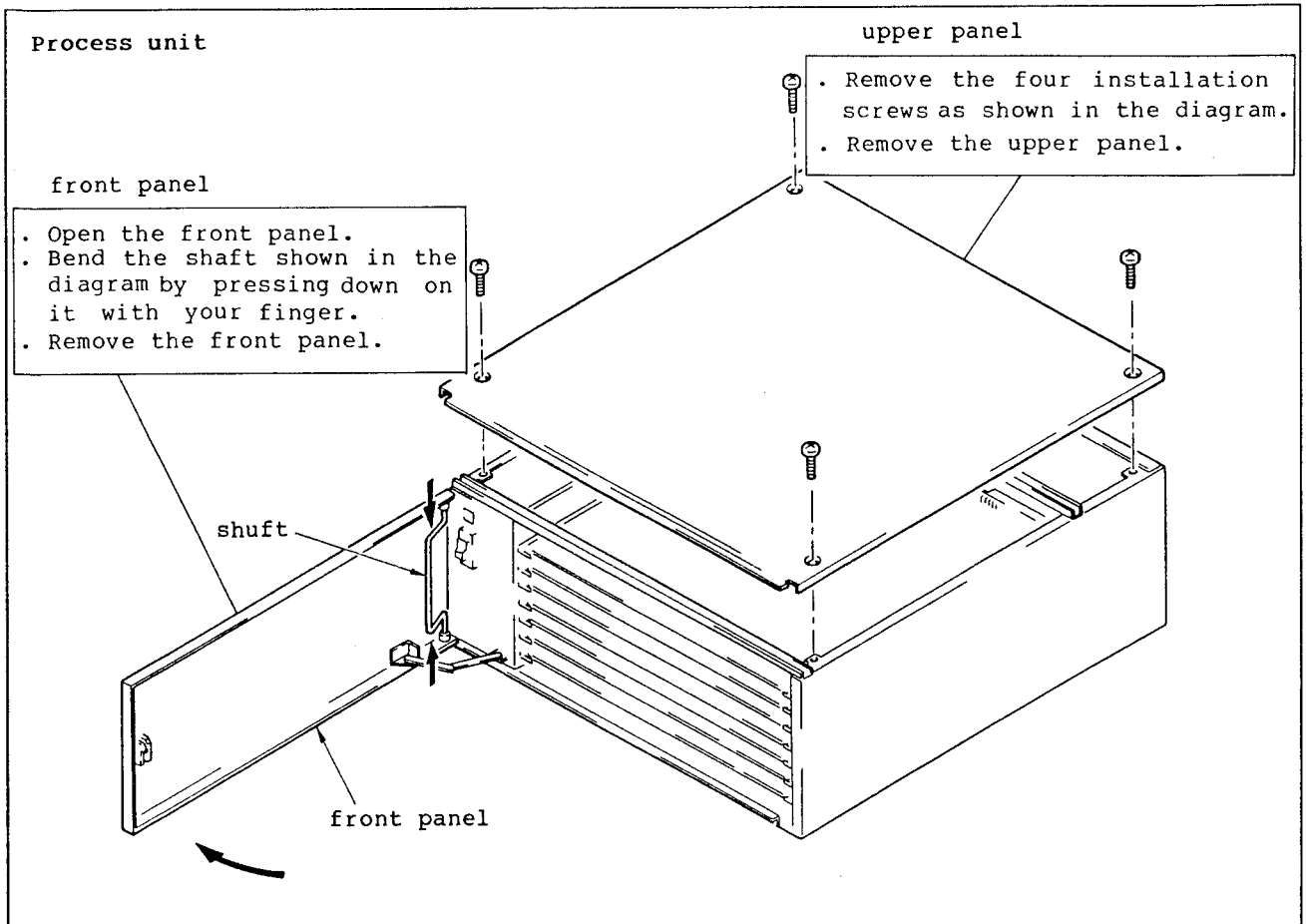
### 1-11. OTHER ACCESSORIES (SOLD SEPARATELY)

#### SWC-2530D

This is the cable used to connect the processor to the console. (It will be available at a later date.)

## SECTION 2 SERVICE INFORMATION

### 2-1. REMOVING THE OUTER CABINET



## 2-2. BOARD LOCATION DIAGRAM

### 2-2-1. Process Unit

Board NO.	Description
CN-330	CONNECTOR
CN-332	CONNECTOR
CN-333	SYNC SEPRATOR
CN-336	CONNECTOR
EF-20	Y (COMPOSITE) SIGNAL PROCESSOR
EF-20C	B-Y (R-Y) SIGNAL PROCESSOR
EN-80	ENCODER
EX-201	EXTENSION BOARD
EX-236	EXTENSION BOARD
HN-105	MOTHER BOARD
HN-138	MOTHER BOARD
IV-25	MODE SET FOR INPUT VIDEO SIGNAL
LE-55	LED BOARD
SD-19	SIGNAL GENERATOR FOR SIGNAL PROCESSOR
SD-20	SYNC GENERATOR, CHROMA KEY, DOWN STREAM KEY SIGNAL GENERATOR
SY-138	SYSTEM CONTROL
SY-154	12 BIT DA CHANGER
WP-27	WIPE SIGNAL GENERATOR

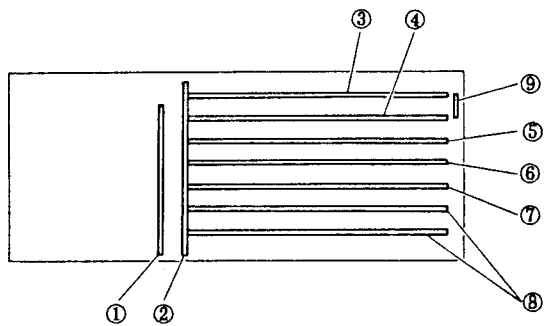
### 2-2-2. Console Unit

Board NO.	Description
KY-155	SWITCH BOARD
KY-157	SUB SWITCH BOARD
KY-158	SUB SWITCH BOARD
LP-47	LED BOARD
LP-48	LED BOARD
LP-49	LED BOARD

## 2-3. CIRCUIT CONFIGURATION

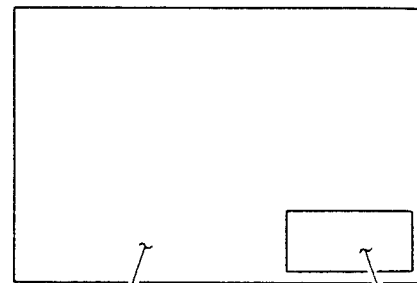
### 2-3-1. Process Unit

<side view>



- ①HN-138
- ②HN-105
- ③WP-27
- ④SY-138
- ⑤SD-19
- ⑥SD-20
- ⑦EF-20
- ⑧EF-20C
- ⑨LE-55

<SY-138 board>

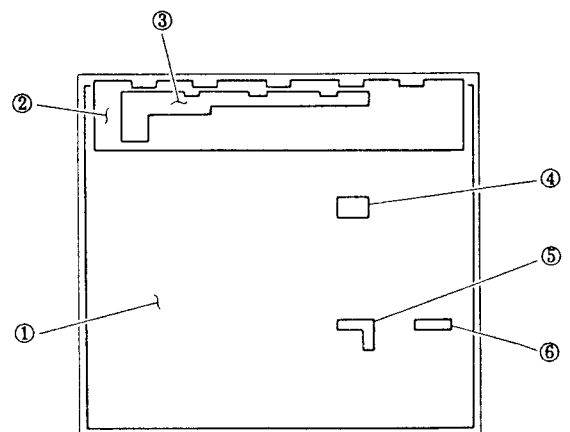


SY-138 board

SY-154 board

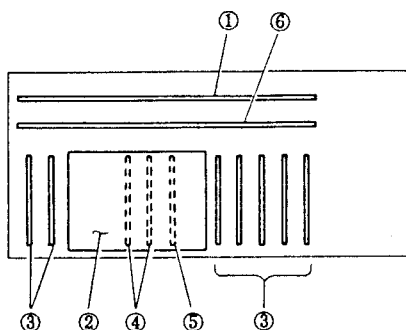
### 2-3-2. Console Unit

<upper view>



- ①KY-155
- ②KY-157
- ③KY-158
- ④LP-47
- ⑤LP-48
- ⑥LP-49

<rear view>



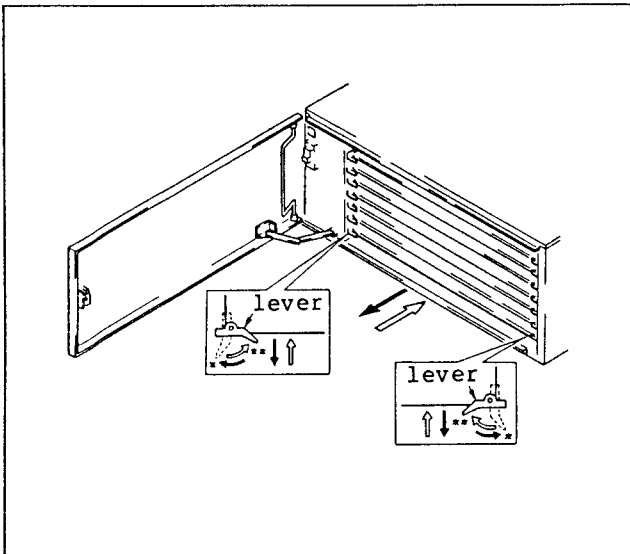
- ①CN-336
- ②CN-332
- ③IV-25
- ④EN-80
- ⑤CN-333
- ⑥CN-330

## 2-4. REMOVING THE BOARDS

### 2-4-1. Process Unit

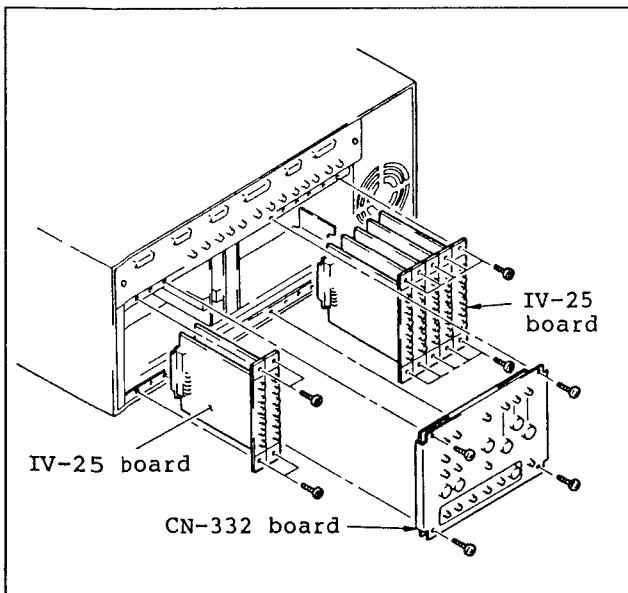
#### (1) Removing/Installing the Boards (Cards)

- The boards can be removed by pushing the board levers in the direction of the \* arrow and pulling the door toward yourself.
- Insert the boards parallel to the board lever guides and the board guides. The boards can be installed by closing the board levers in the direction of the \*\* arrow while inserting the boards into the holes in the left and right of the unit.



#### (2) Removing CN332 and the IV-25 Board.

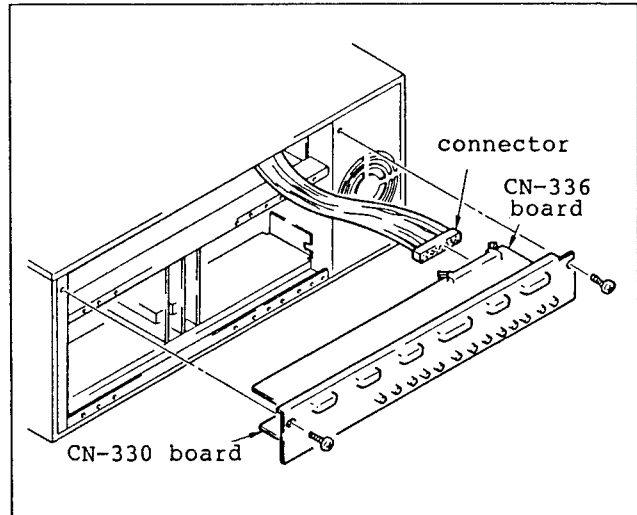
Remove the screws that have been attached and pull them out towards yourself.



#### (3) Removing CN-330 and CN-336 Board

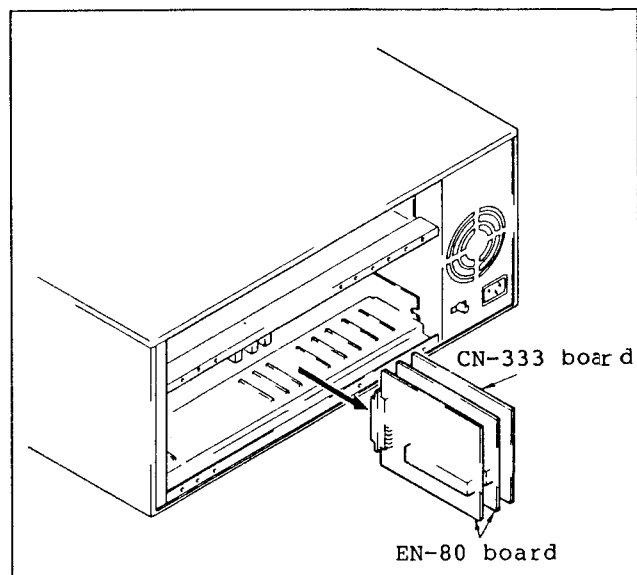
Remove the connector and the screws that have been attached.

Pull them out towards yourself.



#### (4) Removing CN333 and the EN-80 Board

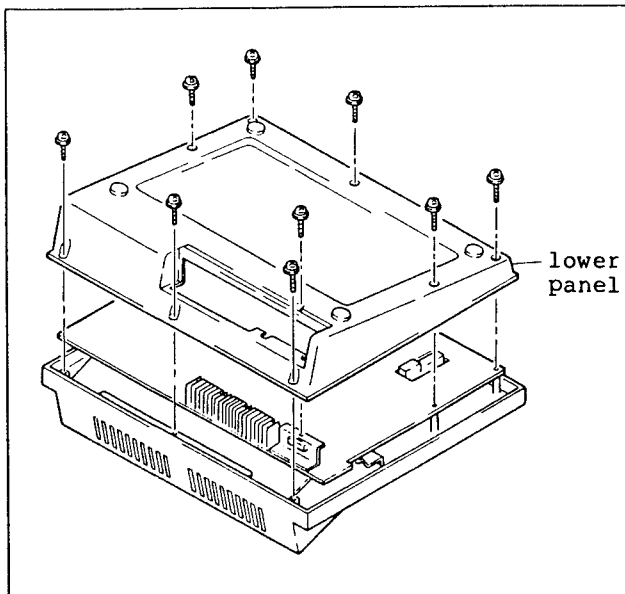
Remove the rear panel and pull the board out towards yourself.



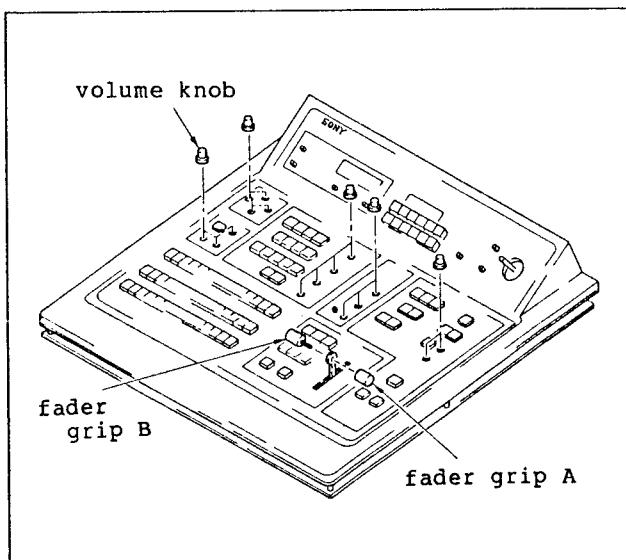


## 2-4-2. Console unit

(1) Remove the lower panel.



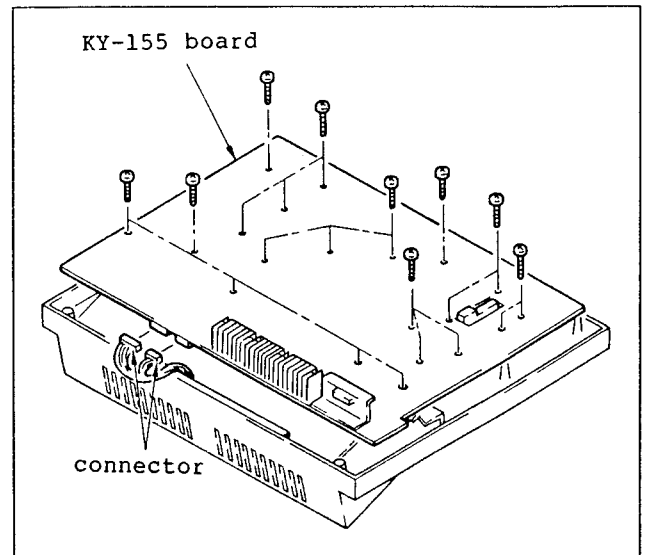
(2) Remove the Fader grip A and B, and sixteen volume knobs.



(3) Removing KY-155 Board

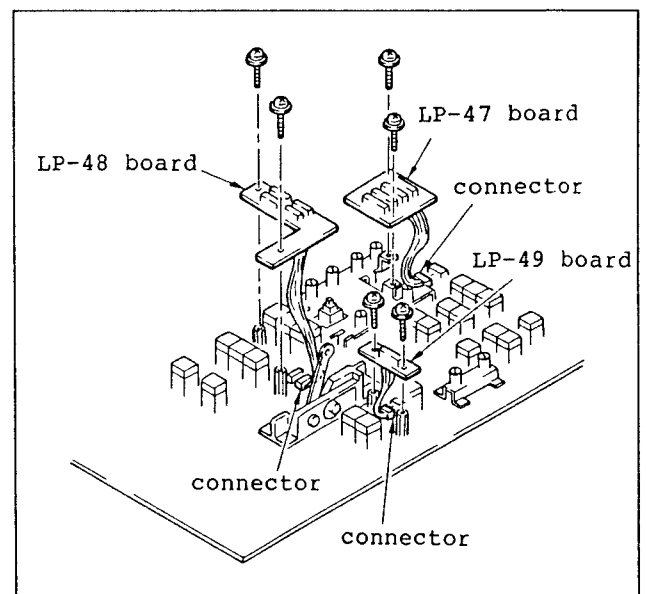
Remove the two connectors and the screws that have been attached.

Remove the KY-155 board.



(4) Removing the LP-47, LP-48, LP-49 board  
Remove connectors, and the screws that have been attached.

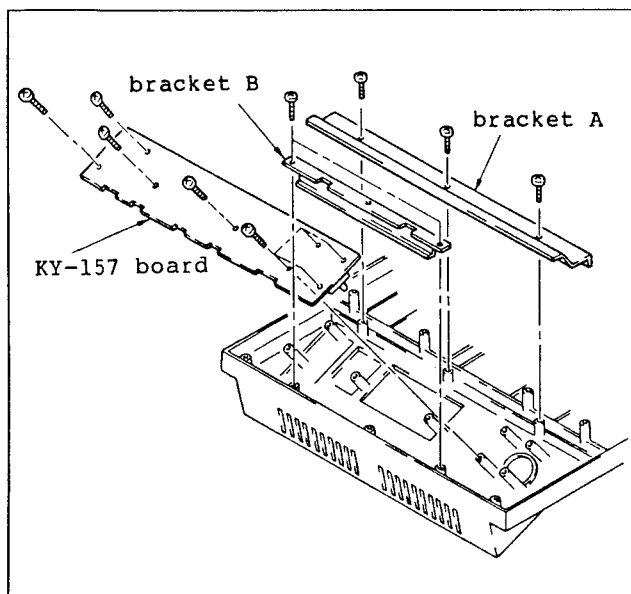
Remove the LP-47, LP-48 and LP-49 board.



(5) Removing KY-157 board

Remove the brackets A and B, and screws that have been attached.

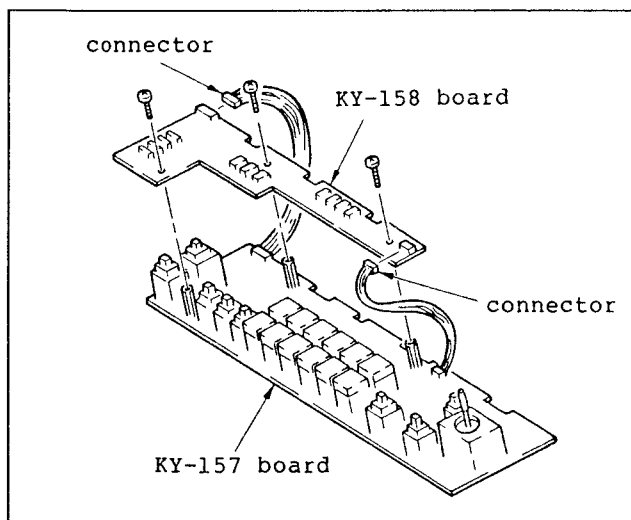
Remove the KY-157 board.



(6) Removing KY-158 board

Remove the two connectors and screws that have been attached.

Remove the KY-158 board on the KY-157 board.

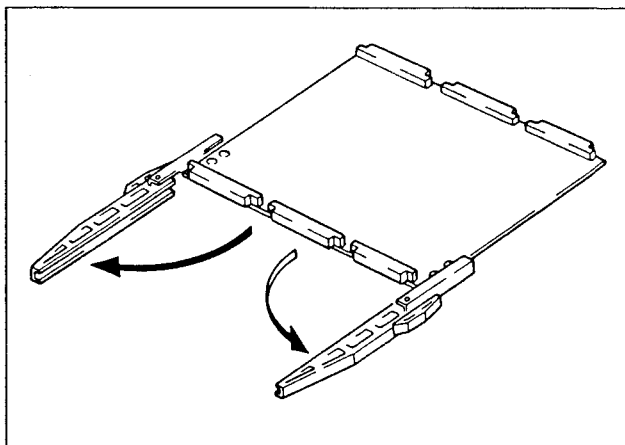


2-5. SERVICING PROCEDURE

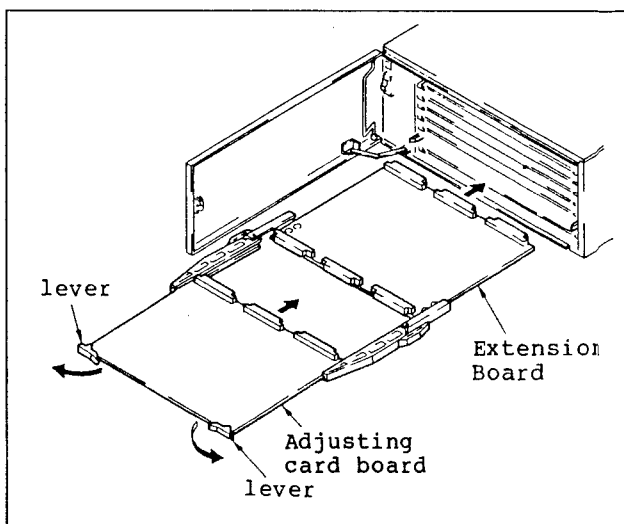
2-5-1. The EX-201 Board

(For the WP-27, SY-138, SD-19, SD-20, EF-20, and EF-20C boards)

(1) Open the rails for the extension board.



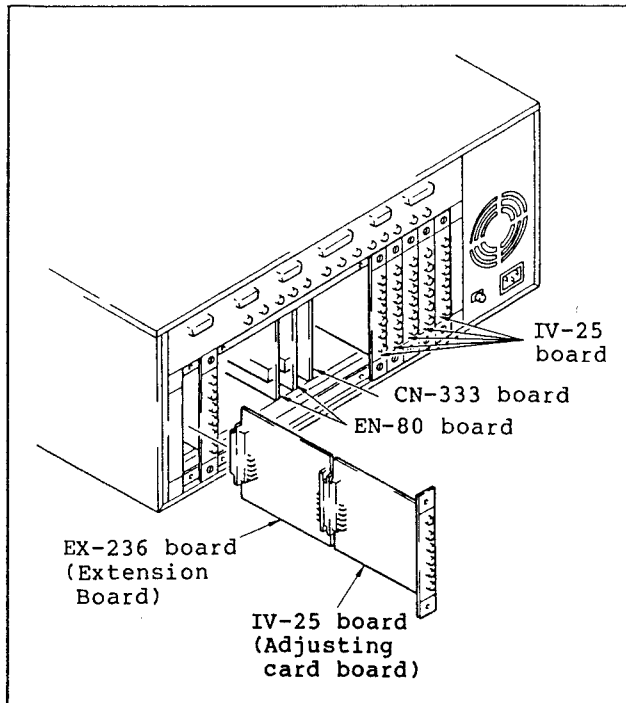
(2) Push the lever open towards the outside, pull out the adjustment board, and push in the extension board.



Note) When WP-27 and SY-138 board make the adjustment, connect the WP-27 board and SY-138 board by connect cable of supplied accessory.

### 2-5-2. The EX-236 Board

(For CN333 and the EN-80, and IV-25 boards)

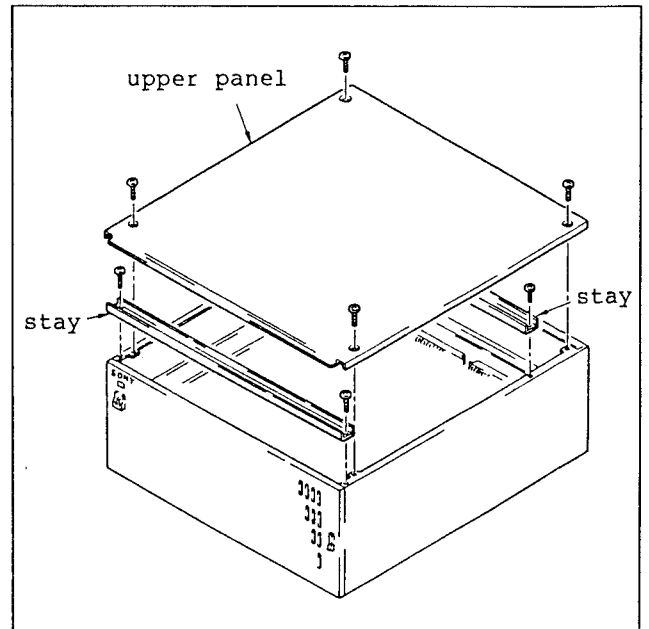


## 2-6. REPLACING MAIN COMPONENTS

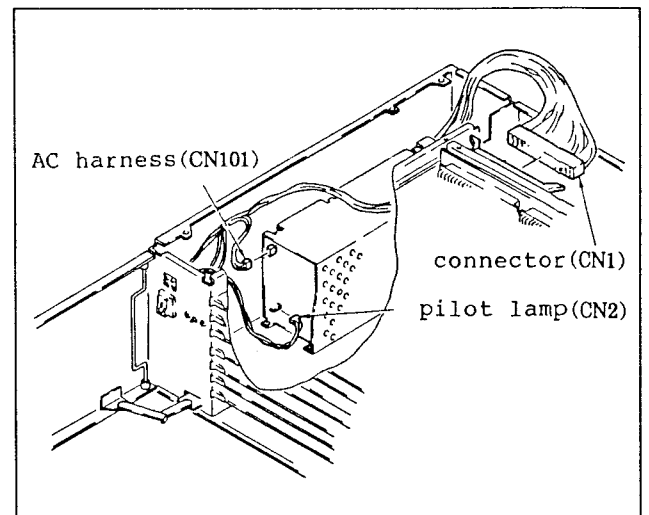
### 2-6-1. Processor

#### Removing the power supply

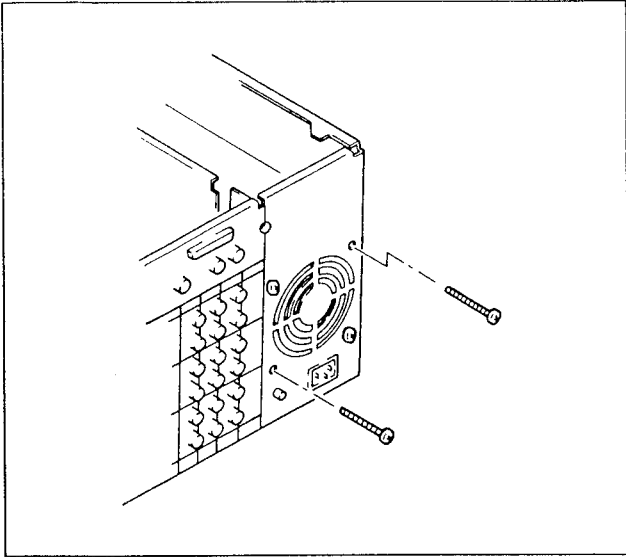
- (1) Remove the upper panel.
- (2) Remove the stays.



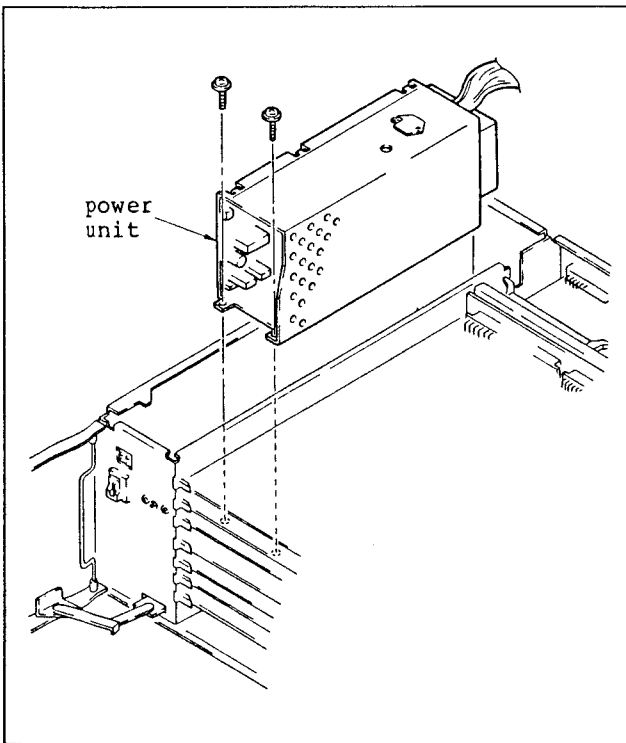
- (3) Remove the AC harness (CN101), the pilot lamp (CN205), and the connector (CN1).



- (4) Remove the screws holding the fan to the rear panel.

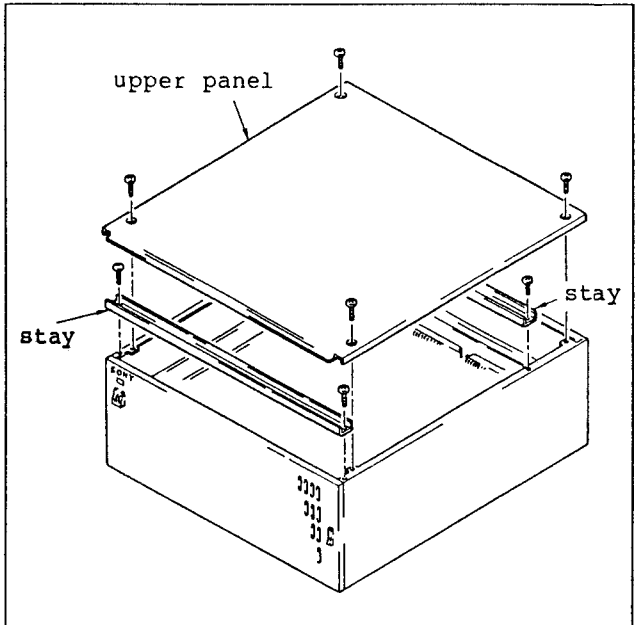


- (5) Remove the screws holding the power supply and then remove the power supply itself.

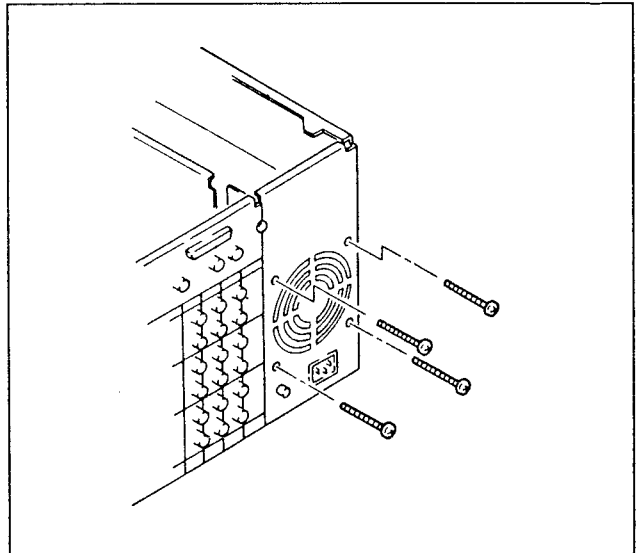


### Replacing the fan

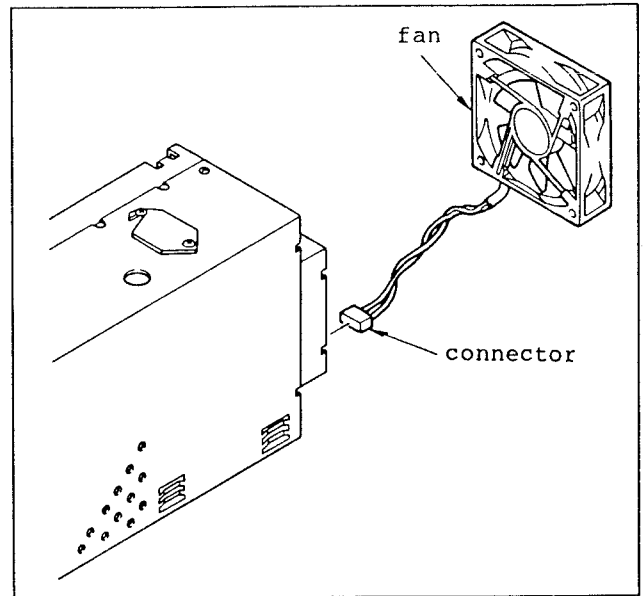
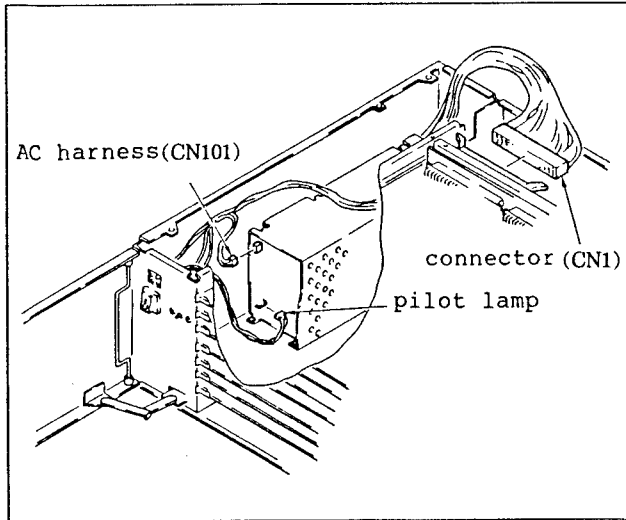
- (1) Remove the upper panel.  
(2) Remove the stay.



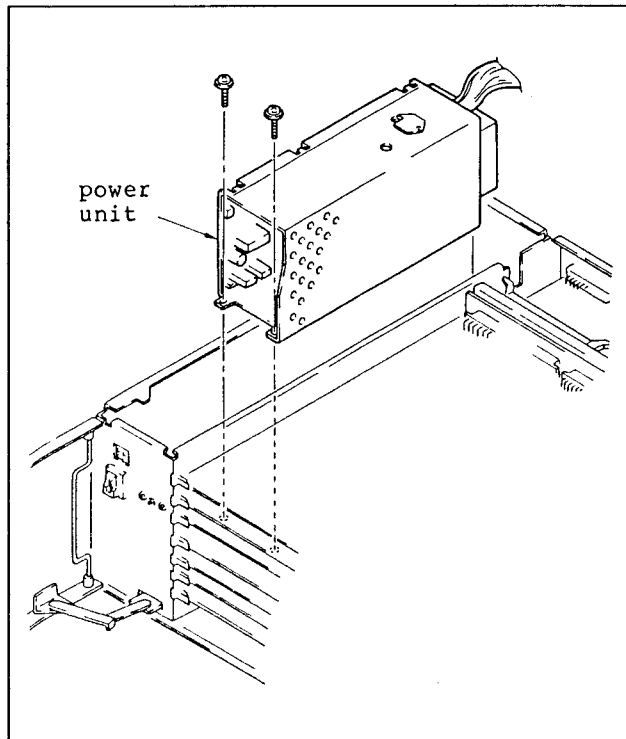
- (3) Remove the screws holding the fan to the rear panel.



- (4) Remove the screws holding the fan to the rear panel.



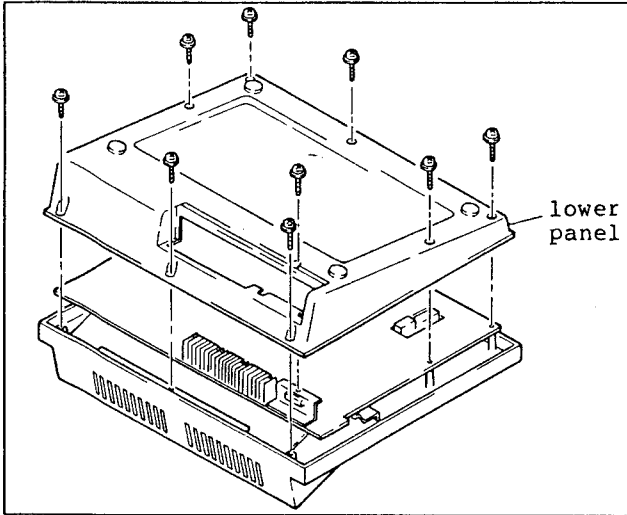
- (5) Remove the screws holding the power supply and then remove the power supply itself.



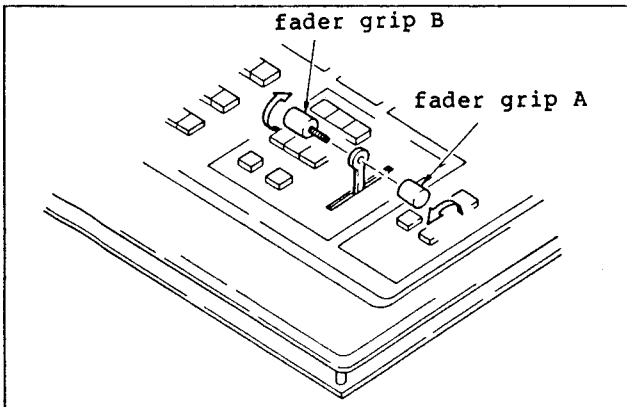
## 2-6-2. Console

### Replacing the fader Assy

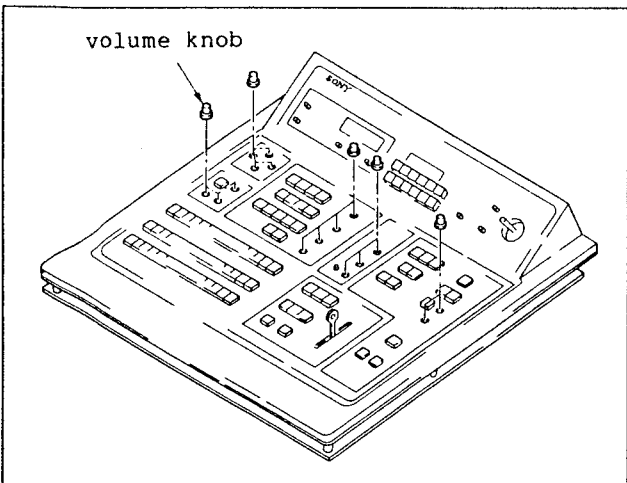
(1) Remove the lower panel.



(2) Remove the fader grip A and B.

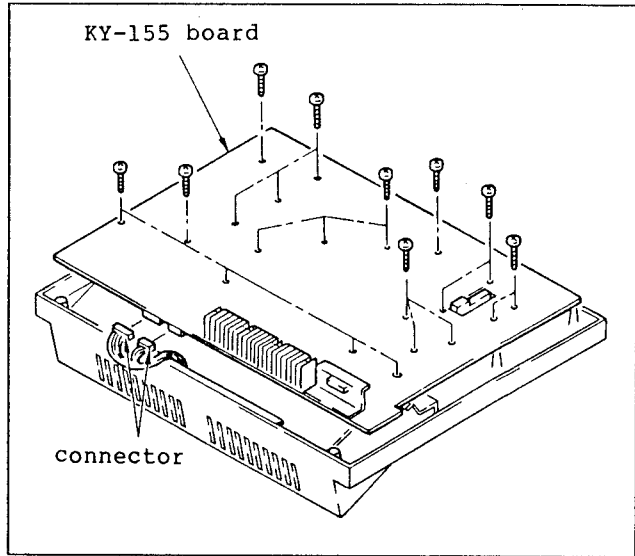


(3) Remove all 15 volume control knobs.

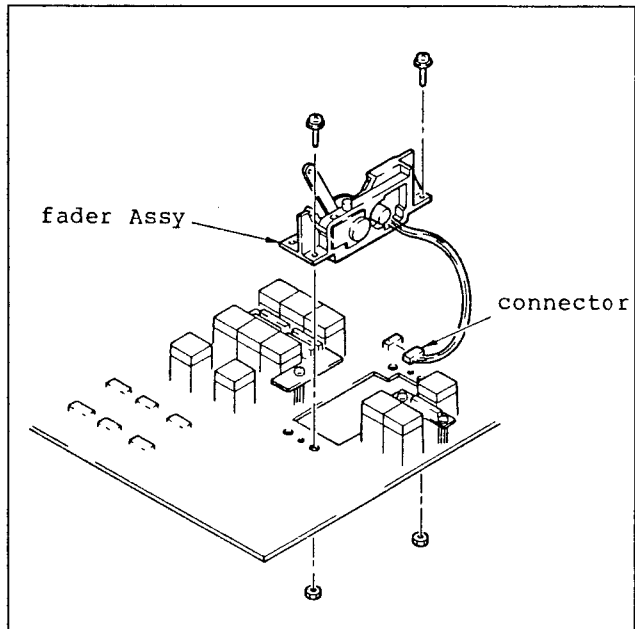


(4) Remove the two connectors and the screws holding the board.

Remove the KY-155 board

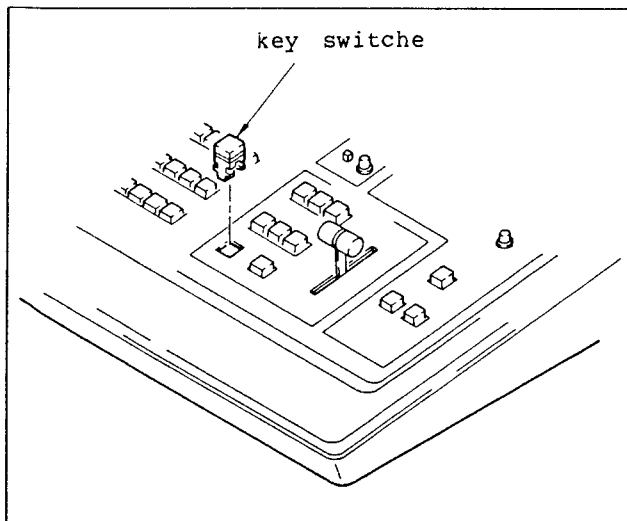


(5) Remove the connector and two screws and replace the fader Assy.

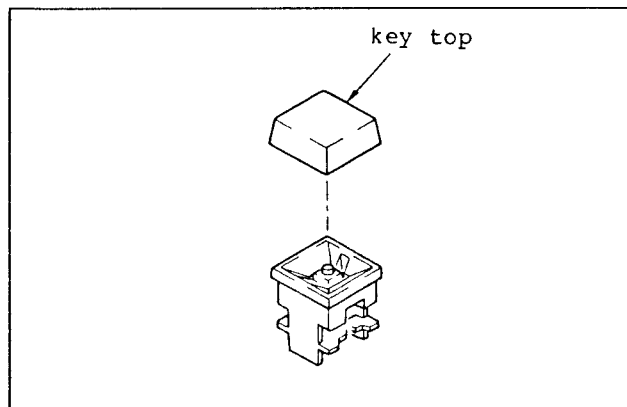


### Replacing the key switch

- (1) Pull out the key switches and remove its.

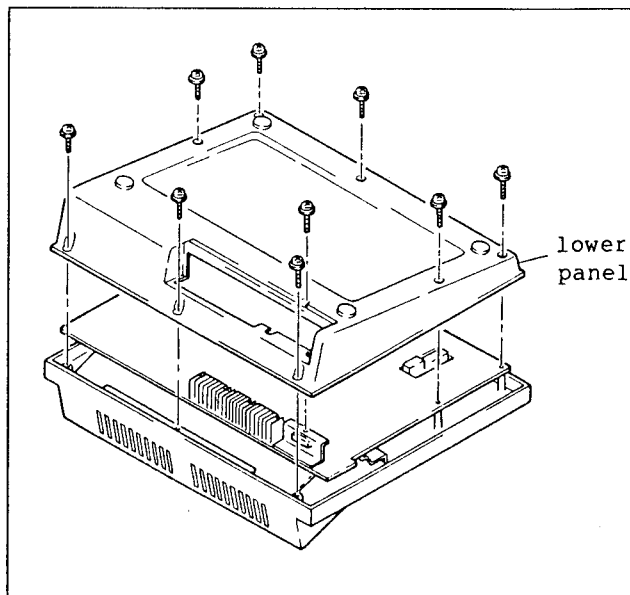


- (2) The side of the switches, and pull out remove the key top.

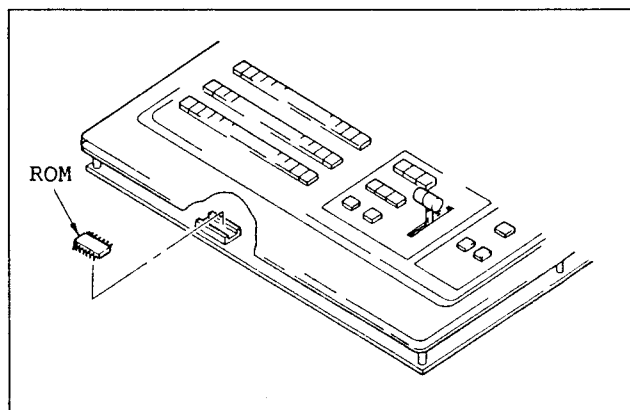


### Replacing the ROM

- (1) Remove the lower panel.



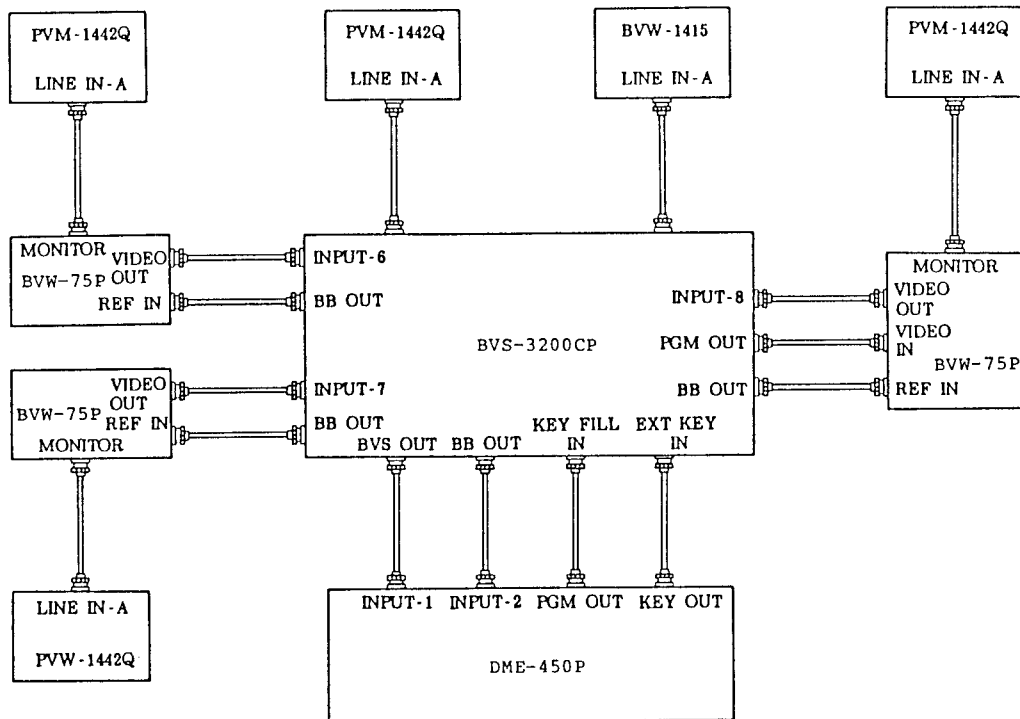
- (2) Replace the ROM.



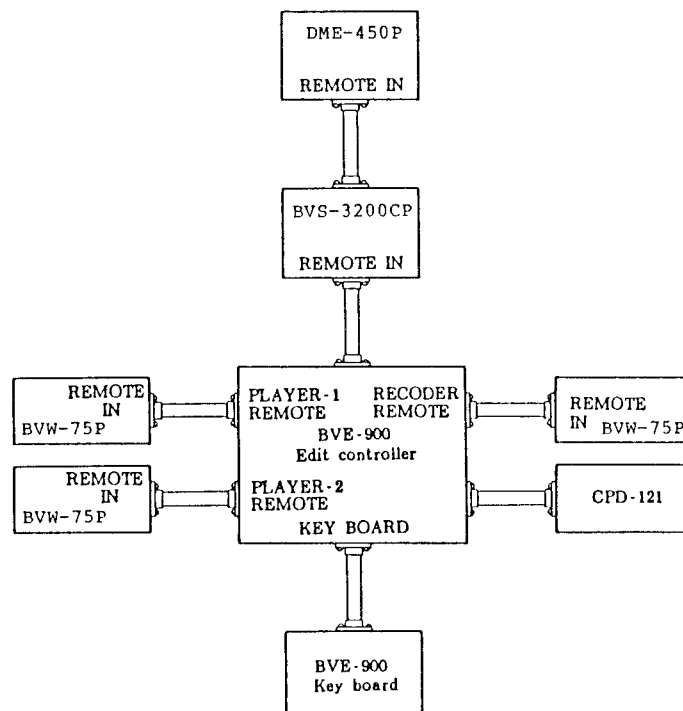
## SECTION 3 TECHNICAL INFORMATION

### 3-1. SYSTEM BLOCK DIAGRAM

#### 3-1-1. Example of an Editing System (Video System)



#### 3-1-2. Example of an Editing System (Control System)





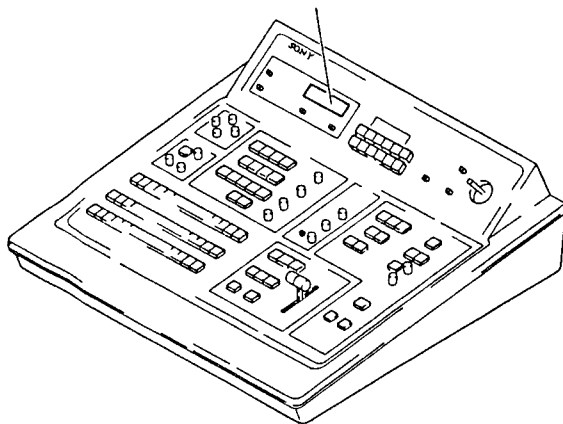
### 3-2. SELF-DIAGNOSTICS

Please refer to the Operation Manual.

### 3-3. STATUS

If any of the following signal numbers appear in the Auto Transition display this represents the corresponding message given.

AUTO TRANSITION DISPLAY



Signal No.	Message
6 0 0	This indicates normal operations.
6 0 1	This alerts you that the unit has over heated. The display 6 0 1 will blink.
6 1 0	This indicates the EDITOR, GPI, or STATUS REPORT are not move function.
6 1 1	This indicates a control signal from the EDITOR.
6 1 2	This indicates a control signal from GPI.
6 1 4	This indicates a control signal from STATUS REPORT.
6 2 0	This indicates that the video signal is selected.
6 2 1	This indicates that the video signal is not selected.
6 3 0	This indicates that information is stored memory.
6 3 1	This indicates that information stored in back-up memory will be lost.

# BVS-3200C/3200CP

マニュアルの内容を下記のように訂正して下さい。

Correct the concepts of the manuals as shown below.

## OPERATION MANUAL

誤

FAULT

正

CORRECT

P45 (JAPANESE)

CRK R-Y, B-Y/RGBスイッチの設定

設定	入力信号フォーマット
R-Y, B-Y*	Y/R-Y/B-Y
RGB	RGB



設定	入力信号フォーマット
R-Y, B-Y	Y/R-Y/B-Y
RGB *	RGB

P37 (ENGLISH)

CRK R-Y, B-Y/RGB switch setting

Setting	Input signal format
R-Y, B-Y*	Y/R-Y/B-Y (Betacam)
RGB	RGB



Setting	Input signal format
R-Y, B-Y	Y/R-Y/B-Y (Betacam)
RGB *	RGB

P38 (FRENCH)

Réglage de l'interrupteur CRK R-Y, B-Y/RGB

Réglage	Format du signal d'entrée
R-Y, B-Y*	Y/R-Y/B-Y (Betacam)
RGB	RGB



Réglage	Format du signal d'entrée
R-Y, B-Y	Y/R-Y/B-Y (Betacam)
RGB *	RGB

P37 (GERMAN)

CRK R-Y, B-Y/RGB-Schalter

Einstellung	Format des Eingangssignals
R-Y, B-Y*	Y/R-Y/B-Y (Betacam)
RGB	RGB



Einstellung	Format des Eingangssignals
R-Y, B-Y	Y/R-Y/B-Y (Betacam)
RGB *	RGB

# MAINTENANCE MANUAL

## 誤 FAULT

P1-2(UC ONLY)

1-5-1 IV-25 board

Factory setting

SW NO.	Setting
S2	OFF



## 正 CORRECT

SW NO.	Setting
S2	ON

P1-4(J, UC, EK)

1-5-2 SD-19 基板

1-5-2 SD-19 board

工場出荷時

Factory setting

SW NO.	Setting
S10	R-Y/B-Y



SW NO.	Setting
S10	R/B

P1-6(J, UC, EK)

1-5-3 SD-20 基板

1-5-3 SD-20 board

工場出荷時

Factory setting

SW NO.	Setting
S603	1 OFF
	2 OFF
	3 OFF
	4 OFF
	5 OFF
	6 OFF
	7 ON
	8 ON



SW NO.	Setting
S603	1 OFF
	2 OFF
	3 OFF
	4 OFF
	5 ON
	6 ON

# SONY

BVS-3100P/3200P/3200CP

## Korrektur der Bedienungsanleitung

In der Bedienungsanleitung sind folgende Korrekturen erforderlich:

Seite 41

1-B. Abgleich der Phase des Schwarzssignals auf die des externen Synchronsignals

Schritt 6:

- falsch: Den B-Eingang wählen und mit ...
- richtig: Den B.B EXT/INT-Schalter auf INT stellen, dann den B-Eingang wählen und mit ...

Schritt 9:

- falsch: Den B.B EXT/INT-Schalter auf EXT setzen und ....
- richtig: Den B.B EXT/INT-Schalter auf INT setzen und ....

Seite 47 bis 49

Phaseneinstellung der Schrifteinblendung-Signalquelle und der Fill-Signale

Einstellvorgang

Ersetzen Sie den Text durch die Erläuterungen auf den folgenden Seiten.

Seite 59

Technische Daten

Allgemeine Daten

Stromversorgung

- falsch: 100 bis 240 V Gleichspannung, 50/60 Hz
- richtig: 220 bis 240 V Wechselspannung, 50/60 Hz

0-302-784-01

### Einstellvorgang

Die Einstellung ist wie folgt vorzunehmen:

- 1 Die Phase zwischen der Schrifteinblendungs-Signalquelle und dem Key-Fill-Signal mit Hilfe einer Verzögerungsleitung einstellen.
- 2 Das Key-Fill-Signal (das momentan über die DSK EXT VIDEO IN-Buchse zugeleitet wird) zur VIDEO IN-Buchse (Primäreingang) leiten und die Horizontal-Synchronphase des Key-Fill-Signals mit den Reglern des angeschlossenen Geräts einstellen.
- 3 Das Key-Fill-Signal wieder zur DSK EXT VIDEO IN-Buchse leiten und die Hilfsträgerphase des Key-Fill-Signals am angeschlossenen Gerät auf die Phase des intern erzeugten Schwarzsymbols (Referenzphase) einstellen.
- 1 Die Zeichensignale der externen Schrifteinblendungs-Signalquelle und die Key-Fill-Signale den DSK EXT KEY- und DSK EXT VIDEO IN-Buchsen zuleiten.
- 2 Den gewünschten Schrifteinblendungseffekt auf dem gewünschten Hintergrund erzeugen. (Siehe unter "Schrifteinblendung" in der Bedienungsanleitung.)
- 3 Die Zeichen auf dem Videomonitor betrachten und die Phase zwischen externer Schrifteinblendungs-Signalquelle und Key-Fill-Signale mit einer Verzögerungsleitung (normalerweise im Zeichengenerator vorhanden) abgleichen.
- 4 Das Zeichensignal des Geräts, das das Key-Fill-Signal liefert, der VIDEO IN-Buchse zuleiten.
- 5 Die Schritte 1 bis 9 des Abschnittes "Phaseneinstellung der Primäreingänge, Unterabschnitt 2. Abgleich der Phase des Primäreingangs auf das Schwarzsymbols" (Seite 42) ausführen, um die Horizontal-Signalphase des zugeleiteten Zeichensignals einzustellen.
- 6 Das externe Key-Fill-Signal (das momentan der VIDEO IN-Buchse zugeleitet wird) wieder der DSK EXT VIDEO IN-Buchse zuleiten (siehe Seite 47 ).
- 7 Den SYNC REPLACEMENT-Schalter auf der Leiterplatte DS-19 auf ON und den B.B EXT/INT-Schalter auf INT schalten.
- 8 Mit der SELECT-Taste in den DSK MATTE-Modus schalten, und den Luminanzpegel am LUM-Regler in der MATTE/BKGD-Gruppe (5) auf ca. 100% einstellen.

- 9 Im KEY FILL-Feld der DOWNSTREAM KEYER-Gruppe 6 als einzustellendes Signal EXT VIDEO wählen.
- 10 Im KEY SOURCE-Feld der DOWNSTREAM KEYER-Gruppe 6 die KEY BUS-Taste drücken und im KEY BUS-Feld die BLACK-Taste drücken.
- 11 Die GAIN- und CLIP-Regler im DOWNSTREAM KEYER-Feld 6 ganz nach rechts drehen.
- 12 Mit der SELECT-Taste in der AUTO TRANSITION RATE-Gruppe 4 den STATUS-Modus wählen.
- 13 Mit den SET-Tasten 912 (Phaseneinstell-Modus) für externes Schrifteinblendungs-Eingangssignal) eingeben. Dann die CUT-Taste in der EFFECTS TRANSITION-Gruppe drücken, um mit der Phaseneinstellung des externen Schrifteinblendungs-Key-Eingangssignals beginnen zu können. Das Ausgangssignal der PGM OUT-Buchsen wird periodisch zwischen internem und externem Schrifteinblendungs-Key-Fill-Signal umgeschaltet.
- 14 Den Waveform-Monitor/das Vektorskop in den WFM-Modus schalten und folgende Einstellungen vornehmen:  
EXT REF: ON  
SWEEPS: 2H  
MAG: ON
- 15 Den Waveform-Monitor/das Vektorskop in den VECT-Modus schalten und den PHASE-Regler so einstellen, daß der Burstvektor auf einer Koordinatenposition liegt.
- 16 Die Hilfsträgerphase des vom angeschlossenen Gerät kommenden Zeichensignals so einstellen, daß der betreffende Farbvektor an der richtigen Stelle liegt. Dabei sicherstellen, daß das Zeichensignal einwandfrei auf dem Videomonitor angezeigt wird.
- 17 Die CUT-Taste in der EFFECTS TRANSITION-Gruppe drücken, um den Phaseneinstell-Modus des externen Schrifteinblendungs-Eingangssignals wieder abzuschalten.

#### Hinweise

- o Wenn bei Modell BVS-3200CP den Primäreingängen Komponentensignale zugeleitet werden, sind die Schritte 7 und 17 nicht erforderlich.
- o Die Hilfsträger-Phaseneinstellung des externen Schrifteinblendungs-Key-Fill-Signals (in den Schritten 7 bis 17) kann erleichtert werden, indem

vor dem Einstellbeginn auf einem Waveform-Monitor oder Vektorskop die Position eines bestimmten Farbvektors des Zeichen-Eingangssignals überprüft wird. Jetzt ist wie folgt zu verfahren:

- 1 Das Zeichensignal einem nicht verwendeten Kanal (A im Anschlußbeispiel) des Waveform-Monitors/Vektorskops zuleiten.
- 2 Den EXT REF-Schalter des Waveform-Monitors/Vektorskops auf OFF stellen.
- 3 Unter Verwendung des PHASE-Reglers des Monitors den Burstvektor des Zeichensignals auf die entsprechende Koordinatenposition verschieben.
- 4 Die Position des betreffende Farbvektors des Zeichensignals auf dem Waveform-Monitor/Vektorskop überprüfen.

## Correction du MODE D'EMPLOI fourni

Quelques descriptions incorrectes ont été découvertes dans le MODE D'EMPLOI fourni. Veuillez les corriger comme suit.

Page 42

### 1-B. Réglage de phase du noir sur la synchronisation externe

Démarche 6 (Incorrect)	Choisir l'entrée B et tourner ...
(Correct)	Régler l'interrupteur B.B EXT/INT sur INT; choisir l'entrée B et tourner...
Démarche 9 (Incorrect)	Commuter l'interrupteur B.B EXT/INT sur EXT et ...
(Correct)	Commuter l'interrupteur B.B EXT/INT sur INT et...

Page 48 à 50

Réglage de phase pour la source/remplissage par incrustation en aval externes

### Démarches de réglage

Veuillez modifier cette section comme indiqué dans les pages suivantes.

Page 61

### Spécifications

#### Caractéristiques générales

Alimentation	BVS-3100P/3200P/3200CP:
(Incorrect)	Secteur 100 à 240 V, 50/60 Hz
(Correct)	Secteur 220 à 240 V, 50/60 Hz



## Démarches de réglage

Pour effectuer les réglages, procéder comme suit.

- (1) Ajuster la phase entre le signal de source d'incrustation en aval et le signal de remplissage d'incrustation en aval avec un circuit de retard.
  - (2) Fournir le signal de remplissage d'incrustation en aval (qui est fourni au connecteur DSK EXT VIDEO IN) au connecteur VIDEO IN (entrée primaire), et ajuster la phase du signal de synchronisation horizontale du signal de remplissage d'incrustation à l'aide des réglages de l'appareil connecté.
  - (3) Fournir à nouveau le signal de remplissage d'incrustation en aval au connecteur DSK EXT VIDEO IN, et ajuster la phase de la sous-porteuse du signal de remplissage d'incrustation en aval sur l'appareil connecté par rapport à la phase du signal du noir produit de manière interne (phase de référence).
- 
- 1 Fournir les signaux de caractère en tant que source d'incrustation en aval externe, et les signaux de remplissage d'incrustation de l'appareil connecté aux connecteurs DSK EXT KEY et DSK EXT VIDEO IN.
  - 2 Créer un effet d'incrustation en aval sur le fond souhaité à l'aide des signaux de source d'incrustation en aval et de remplissage par incrustation en aval (se reporter à "Incrustation en aval" dans le manuel de l'utilisateur).
  - 3 Observer les caractères sur le moniteur vidéo, ajuster les phases entre les signaux de source d'incrustation en aval et de remplissage par incrustation en aval par le circuit de retard (qui peut être installé dans le générateur de caractère).
  - 4 Fournir le signal de caractère de l'appareil produisant le signal de remplissage d'incrustation en aval au connecteur VIDEO IN.
  - 5 Ajuster la phase du signal de synchronisation horizontale du signal de caractère, en se référant aux démarches 1 à 9 de la section "Réglage de phase pour les signaux d'entrée primaire -- 2. Réglage de phase du noir sur la synchronisation externe (page 43).
  - 6 Fournir le signal de remplissage d'incrustation en aval externe (qui est fourni au connecteur VIDEO IN) à nouveau au connecteur DSK EXT VIDEO IN, comme illustré en page 48.
  - 7 Sur la plaquette SD-19, commuter l'interrupteur SYNC REPLACEMENT ON/OFF sur ON et commuter l'interrupteur B.B. EXT/INT sur INT.
  - 8 Choisir le mode DSK MATTE par la touche SELECT et ajuster le niveau de luminance sur 100% environ, à l'aide du réglage LUM du groupe MATTE/BKGD [5].
  - 9 Choisir EXT VIDEO comme signal à régler à l'aide des touches KEY FILL du groupe DOWNSTREAM KEYS [6].
  - 10 Choisir KEY BUS pour la source d'incrustation dans le groupe DOWNSTREAM KEYS [6] et choisir BLACK dans KEY BUS [1].

- 11 Désenclencher la touche KEY INVERT et tourner les réglages GAINS et CLIP à fond dans le sens des aiguilles d'une montre du groupe DOWNSTREAM KEYS [6].
- 12 Choisir le mode STATUS par la touche SELECT du groupe AUTO TRANSITION RATE [4].
- 13 Choisir "912" (mode de réglage de phase du signal d'entrée d'incrustation en aval externe) par les touches SET. Appuyer sur la touche CUT du groupe EFFECTS TRANSITION pour lancer le mode de réglage de phase du signal d'entrée d'incrustation en aval externe. Le signal de sortie aux connecteurs PGM OUT alterne périodiquement entre le remplissage par incrustation en aval interne et le remplissage par incrustation en aval externe.
- 14 Placer le moniteur de forme d'onde/vecteur en mode WFM et ajuster les réglages comme suit.  
EXT REF: ON  
SWEEPS : 2H  
MAG: ON
- 15 Placer le moniteur de forme d'onde/vecteur en mode VECT et tourner le réglage PHASE pour placer le vecteur de salve sur son repère de croisées de fils.
- 16 Ajuster la phase de sous-porteuse du signal de caractère de l'appareil raccordé, pour placer le vecteur d'une couleur spécifique sur la position correcte en veillant à ce que la teinte du signal de caractère apparaisse correctement sur le moniteur vidéo.
- 17 Appuyer sur la touche OUT du groupe EFFECTS TRANSITION pour libérer le mode de réglage de phase du signal d'entrée d'incrustation en aval externe.

#### Remarque

- Les étapes 7 et 17 ne sont pas requises quand le signal composant vidéo est utilisé en tant qu'entrées primaires sur le BVS-3200C/3200CP.
- L'ajustement de phase de la sous-porteuse du signal de remplissage d'incrustation en aval externe, dans les démarches 7 à 17, est facile si vous assurez la position d'un vecteur d'une couleur spécifique dans le signal de caractère d'entrée en utilisant le moniteur de forme d'onde/vecteur avant de commencer le réglage. Procéder comme suit:
  - (1) Fournir le signal de caractère à un canal inutilisé ("A" dans l'exemple de connexion) du moniteur de forme d'onde/vecteur.
  - (2) Régler l'interrupteur EXT REF du moniteur de forme d'onde/vecteur sur OFF.
  - (3) Placer le vecteur de salve du signal de caractère sur son repère de croisée de fils à l'aide du réglage PHASE sur le moniteur.
  - (4) Assurer la position d'un vecteur d'une couleur spécifique du signal de caractère sur le moniteur de forme d'onde/vecteur.